

- Fig. 12. *Buchanga leucogenys*. Howlik, 16 June, 1907.
 „ 13. *Pycnonotus sinensis*. Howlik, 18 May, 1907.
 „ 14. *Copsychus saularis*. Howlik, 11 June, 1906.
 „ 15. *Lanius collurio*. Luktau, near Tak-hing, 8 July, 1907.
 „ 16. *Chibia hottentotta*. Howlik, 3 June, 1906.
 „ 17. *Urocissa erythrorhyncha*. Hong Kong, 4 May, 1908.
 „ 18. *Lanius lucionensis*. Shau-kwan (North River), 19 May, 1905.
 „ 19. *Limnobanus fuscus*. Sam-shui, 8 August, 1907.
 „ 20. *Otocompsa emeria*. Howlik, 5 June, 1904.
 „ 21. *Pycnonotus atricapillus*. Macao, 13 May, 1906.
 „ 22. *Myiophonus caeruleus*. Hong Kong, 19 May, 1908.

[To be continued.]

XII.—*A Reference List of the Birds of New Zealand.* Part I.

By GREGORY M. MATHEWS, M.B.O.U., and TOM IREDALE.

THE preparation of the “Reference List to the Birds of Australia” by one of us necessitated the examination of much New Zealand material, and the more recent investigation into the Petrels of the Southern Hemisphere by the same author during the progress of his ‘Birds of Australia,’ indicated so many errors in the accepted nomenclature of the birds of New Zealand that the publication of a corrected list seems desirable. The other, having studied the New Zealand Avifauna, both in the field and in the cabinet, had much knowledge regarding the more local fauna. The collaboration will, we trust, place the nomenclature upon a sound basis for future workers. We would point out that this List is entirely new work, in which all the birds have been examined and the references verified and specimens compared. No such work has been done in connection with New Zealand birds since the first issue of Buller’s ‘Birds of New Zealand’ forty years ago, and, unfortunately, since that time little attempt has been made to bring the nomenclature there used into line with that commonly accepted by the scientific world of the present day. As recently as 1906 Buller published his ‘Supplement to the Birds of New Zealand,’ and therein altered the arrangement

Fig. 12. introduced

of the higher groupings, so that they should agree with that adopted in the 'Hand-list of Birds' of R. B. Sharpe. That Hand-list, however, mainly utilised the nomenclature introduced by Buller as regards the genera and species of birds in the New Zealand Fauna. Moreover, as it was based on the 12th edition of Linné's '*Systema Naturæ*,' 1766, instead of the 10th edition, 1758, as now universally adopted, changes from that cause are necessary. The rigid application of the Law of Priority, which we hold to be absolutely the only road to finality, is the reason for other alterations. We are obliged to state, however, that the majority of the corrections made hereafter cannot be laid to either of the preceding debatable points, but rather to the carelessness of earlier workers. Instead of the descriptions of the birds being carefully read, guesswork appears to have been thought good enough for New Zealand birds. Indeed, it seems to have been quite the usual course when a new or hitherto unnoticed bird was observed, and this is apparent from the writings of Buller, Hutton, and Finsch, each of whom indulged in it in certain cases.

We have endeavoured, therefore, to fix the names so that all workers can check our results, and for that reason have appended explanatory notes to most of the alterations. By this means we hope to make our List fulfil its title.

In fixing the type-localities of the earlier species we had first to unravel Sparrman's connection with New Zealand. This does not seem to have been done before, as it caused us much research to disentangle it. We find that Sparrman accompanied Forster on Cook's Second Voyage, at Forster's expense, as a salaried assistant to the latter. It consequently follows that Sparrman's collection must have been made under Forster's supervision, and after Forster had completed his own wants. We have, therefore, decided to fix as the type-locality of all the species of New Zealand birds described by Sparrman, that absolutely known from Forster's descriptions and Geo. Forster's drawings. This explanation is necessary, as Sparrman gave as locality of many of the birds, "Cape of Good Hope." His names have priority over those of Gmelin, who latinised Latham's descriptions drawn up from

Forster's specimens and manuscript. Forster's own descriptions were not published until almost sixty years afterwards.

Attention must be drawn to our treatment of an article by J. B. Ellman, entitled "Brief Notes on the Birds of New Zealand," which appeared in the 'Zoologist' for 1861, pp. 7464-7473. In that list, birds were recorded from hearsay and sight, and to these Latin names were affixed, some of which were new. Fortunately the majority of these are without description and generally synonyms, and accurately indeterminable. We have therefore not included them in the synonymy, as, though in many cases guesses can be made as to what Ellman meant, there is too much risk and no gain whatever. For instance, Ellman was the first to admit *Procellaria æquinoctialis* to the New Zealand List, but Hutton (Cat. Birds New Zeal. p. 80, 1871) has stated that the bird so determined was *Prion banksi*!

Throughout this List we use trinomials wherever necessary, and would note that we use them for island forms, as we consider they show the relationships most accurately (*cf.* Stone, 'Auk,' 1899, p. 374). The question as to the limits of the New Zealand Region has engaged the attention of both of us, and, after careful consideration from all aspects, we confidently put forward those which have been most generally accepted, viz., Kermadec Islands, North Island, South Island, the Chatham Group, Stewart Island, and the subantarctic Islands to the south; these include the Snares, the Auckland Islands, Antipodes, Bounty, Campbell and Macquarie Islands.

We have *not* included Lord Howe and Norfolk Islands, and have already, individually, put forward our arguments against such inclusion, and we have a full paper in preparation detailing all the facts in support of our views. In that paper much new and interesting information will be utilised.

As Buller's 'Supplement' contains all the Birds of the New Zealand Region and is the latest authority on the subject, we have given a reference to that work so that it will be at once easy to fix the bird named in this List. Almost all the New Zealand birds have been figured in the various editions of Buller's 'Birds of New Zealand,' so that this List is mainly critical and should be used in connection with that work.

Class A V E S.

Subclass PALÆOGNATHÆ.

OrderAPTERYGIFORMES.

FamilyAPTERYGIDÆ.

GenusAPTERYX.

Apteryx Shaw & Nodder, Nat. Miscellany, vol. xxiv. 1813, pl. 1057.

Type (by monotypy) : *A. australis* Shaw & Nodder.

Apteryx australis australis Shaw & Nodder. South Island Kiwi.

Apteryx australis Shaw & Nodder, Nat. Miscell. vol. xxiv. 1813, pl. 1057 : Dusky Sound, South Island.

Synonyms :—

Dromiceius novæzealandiæ Lesson, Manuel d'Ornith. vol. ii. 1828, p. 210 : same locality.

? *Apteryx fusca* Potts, Trans. New Zeal. Inst. vol. v. 1873, p. 196, nom. nud.

Apteryx australis Buller, Suppl. vol. i. p. 11.

Range :—South Island (breeding).

Apteryx australis mantelli Bartlett. North Island Kiwi.

Apteryx mantelli Bartlett, Proc. Zool. Soc. for 1850, 1852, p. 275 : North Island.

Synonyms :—

Apteryx bulleri Sharpe, Trans. New Zeal. Inst. vol. xxi. 1889, p. 224 : North Island.

Apteryx mantelli Buller, Suppl. vol. i. p. 12.

Apteryx bulleri id. ibid. p. 17.

Range :—North Island (breeding).

Note :—Buller retained two forms of *Apteryx australis* as occurring in the North Island, and wrote : “The name of *Apteryx bulleri* seems to me more convenient than the alternative trinomial one of *Apteryx australis bulleri*,”

adding, "I am old-fashioned enough to be wholly opposed to the trinomial system of nomenclature, now so much in vogue." However, as he admitted that his *A. bulleri* was simply a colour-variation, writing "The range of *Apteryx bulleri* is co-extensive with that of *A. mantelli*," it will be seen that our present usage of trinomials will not meet the case. We are not by any means satisfied that the forms of North Island Kiwis and their exact distribution are at present satisfactorily determined.

***Apteryx australis lawryi* Rothschild.** Stewart Island Kiwi.

Apteryx lawryi Rothschild, Bull. Brit. Orn. Club, vol. i. 1893, p. lxi : Stewart Island.

Synonym :—

Apteryx lawryi Buller, Suppl. vol. i. p. 1.

Range :—Stewart Island.

Note:—Though the author of this form has himself rejected it, we think that further research will show the advisability of its retention as a valid subspecies. The majority of well-authenticated specimens show that a larger form is recognisable. *Apteryx maxima* Bonaparte has been well discussed and can certainly be dismissed as indeterminate.

***Apteryx haastii* Potts.** Great Grey Kiwi.

Apteryx haastii Potts, Trans. New Zeal. Inst. vol. iv. 1872, p. 204 : near Okarito, South Island.

Synonym :—

Apteryx haasti Buller, Suppl. vol. i. p. 25.

Range :—West Coast Ranges of South Island (breeding).

***Apteryx owenii owenii* Gould.** Little Grey Kiwi.

Apteryx owenii Gould, Proc. Zool. Soc. 1847, p. 93 : New Zealand.

Synonym :—

Apteryx oweni Buller, Suppl. vol. i. p. 19.

Range :—? Both Islands (breeding).

Apteryx owenii occidentalis Rothschild. West Coast Kiwi.

Apteryx occidentalis Rothschild, Bull. Brit. Orn. Club, vol. i. 1893, p. lxi : West Coast of South Island.

Synonym :—

Apteryx occidentalis Buller, Suppl. vol. i. p. 23.

Range :—West Coast Ranges of South Island (breeding).

Note :—It seems apparent that the forms of the Little Grey Kiwi are not yet understood. Rothschild has admitted an Alpine form living in the South Island of which the type, according to Buller, was obtained at Dusky Sound, South Island.

From not far away Potts described *Apteryx mollis* (Trans. New Zeal. Inst. vol. v. 1873, p. 196), viz., Martin Bay, on the west coast of the South Island. This was founded on an albinistic form and has been referred to the synonymy of *A. owenii*, but the measurements given seem to agree better with Rothschild's *A. occidentalis*. Further, though various records from the North Island are extant, it would seem that if *A. owenii* occurs at all in that island it will be in a different form. At any rate, a bird supposed to have been procured in the North Island was once called *A. owenii* and a second time *A. occidentalis*.

Much more work seems necessary before we can be said to know all about the distribution of *Apteryx*.

Subclass NEOGNATHÆ.

Order GALLIFORMES.

Family MEGAPODIDÆ.

Megapodius pritchardi Gray.

Note :—In the 'Supplement,' vol. i. pp. 31–33, Buller included *Megapodius pritchardi* Gray, and, moreover, gave a coloured plate of the adult and chick. The grounds for inclusion were that formerly a mound-building bird had inhabited the crater of Sunday Island, one of the Kermadec Group. The story was second-hand upon Cheeseman's receipt of it (Trans. New Zeal. Inst. vol. xxiii. 1890, p. 219), and consequently valueless from a scientific point of view.

One of the present writers spent almost the whole year 1908 upon Sunday Island, and had the opportunity of hearing all the stories relative to the mythical mound-builder. There can be no doubt that nothing definite whatever can be arrived at regarding this mound-builder, and the assumption that it might have been a Megapode has not even a basis. It could certainly not have been *Megapodius pritchardi*, as that bird *does not build a mound*. Lister (Proc. Zool. Soc. 1911, p. 749 et seq.) has given a detailed history of the genus *Megapodius* in the Pacific, and, independently confirming the present writer's conclusions as to the improbability of such a form occurring at the Kermadees, wrote: "It therefore seems to me that we have no good evidence that the genus *Megapodius* formerly inhabited the Kermadec Islands, *and absolutely none that M. pritchardi lived there.*" The italics are ours.

We might note that Buller included a sentence to the effect (p. 40) that the Pigeon formerly inhabiting the Kermadees could be accepted as identical with the New Zealand bird. The stories regarding the Pigeon are even more mythical than those regarding the "Mound-builder," and are absolutely unworthy of inclusion in any scientific work.

Family PHASIANIDÆ.

Genus COTURNIX.

Coturnix Bonnaterra, Tabl. Encycl. Méthod., Ornith. vol. i. 1791, p. lxxxvii.

Type (by tautonymy) : *C. coturnix* (Linné).

Coturnix novæzealandiæ Quoy & Gaimard. New Zealand Quail.

Coturnix novæzealandiæ Quoy & Gaimard, Voy. de l'Astrol., Zool. vol. i. 1830, p. 242 : Baie Chouraki, North Island.

Synonym :—

Coturnix novæzealandiæ Buller, Suppl. vol. i. p. 34.

Range :—Formerly both Islands. Now extinct.

Order COLUMBIFORMES.

Family TRERONIDÆ.

Genus HEMIPHAGA.

Hemiphaga Bonaparte, Comptes Rendus Sci. Paris, vol. xxxix. 1854, p. 1076.

Type (by original designation) : *H. novæseelandiæ* (Gmelin).

Hemiphaga novæseelandiæ novæseelandiæ (Gmelin). New Zealand Pigeon.

Columba novæseelandiæ Gmelin, Syst. Nat. 1789, p. 773 : Dusky Sound, South Island.

Synonyms :—

Columba zealandica Latham, Index Ornith. vol. ii. 1790, p. 703 : same locality.

Columba spadicea leucophæa Hombron & Jacquinot, Ann. Sci. Nat. Paris, 2nd ser. vol. xvi. 1841, p. 319 : Akaroa, South Island.

Columba argetræa Forster, Descr. Anim. ed. Licht. 1844, p. 80 : Dusky Sound, South Island.

Hemiphaga novæzealandiæ Buller, Suppl. vol. i. p. 36.

Range :—Both Islands (breeding).

Hemiphaga novæseelandiæ chathamensis (Rothschild). Chatham Islands' Pigeon.

Carpophaga chathamensis Rothschild, Proc. Zool. Soc. 1891, p. 312 : Chatham Islands.

Synonym :—

Hemiphaga chathamensis Buller, Suppl. vol. i. p. 41.

Range :—Chatham Islands (breeding).

Order RALLIFORMES.

Family RALLIDÆ.

Genus RALLUS.

Rallus Linné, Syst. Nat. 10th ed. 1758, p. 153.

Type (by subsequent designation) : *R. aquaticus* Linné.

Rallus muelleri Rothschild. Auckland Islands' Rail.

Rallus muelleri Rothschild, Bull. Brit. Orn. Club, no. viii. 1893, p. xli : Auckland Islands.

Synonym :—

Hypotænidia muelleri Buller, Suppl. vol. i. p. 42.

Range :—Auckland Islands.

Note :—The specimen recorded by Von Hügel ('Ibis,' 1875, p. 393) as *Rallus brachypus* from the Auckland Islands is preserved in the Rothschild Museum, Tring, where it has been examined by us. It undoubtedly belongs to the East Australian race of *Rallus pectoralis* Temminck, as has been already pointed out by one of us (Mathews, Birds Austr. vol. i. 1911, p. 185, footnote), and it seems strange that it should have occurred on the islands where there is now (though possibly extinct) resident a closely allied but degenerate relation, and to us the record seems too obscure for admission to the New Zealand List. It should be noted that *Rallus muelleri* is an aberrant member of the genus, though it has no claim to be included in the genus *Hypotænidia*.

Genus CABALUS.

Cabalus Hutton, Trans. New Zeal. Inst. vol. vi. 1874, p. 108.

Type (by monotypy) : *C. modestus* (Hutton).

Cabalus modestus (Hutton). Little Chatham Islands' Rail.

Rallus modestus Hutton, Ibis, 1872, p. 247 : Chatham Islands.

Synonym :—

Cabalus modestus Buller, Suppl. vol. i. p. 45.

Range :—Chatham Islands (breeding).

Note :—With regard to this species Buller wrote : "The curvature of the bill is more pronounced in the larger (presumably the male) bird, being very similar to that of the Moeriki (*Cabalus dieffenbachi*), as figured in the 'Transactions of the New Zealand Institute' (vol. vi. p. 12),

but more slender, and I feel confirmed in the opinion that the two species are referable to one and the same genus, although, for the sake of consistency, I now follow Dr. Sharpe in referring the latter to the genus *Nesolimnas*." When Dr. Andrews introduced the genus *Nesolimnas* he was writing about the "Extinct Birds of the Chatham Islands," and there advocated the theory of parallelism of evolution to account for the similarity of the Chatham Islands (extinct) *Diaphoropteryx* to the Mauritian *Aphanapteryx*. It may be of interest to here note some facts which seem to confirm the theory of convergence with regard to these Rails which have or are developing flightlessness.

The present form is descended from a species of *Rallus*, such as *Rallus pectoralis*, and, in addition to its flightless wings, the bill has become longer and more curved. The bird from Auckland Islands, *Rallus muelleri*, is an intermediate stage, not so advanced as *Cabalus modestus*, but still noticeably differing from *Rallus pectoralis* in structure, though it closely resembles it in coloration. The other Chatham Island Rail, *Nesolimnas dieffenbachii*, which Buller would associate with *C. modestus* on account of the curved bill, retains in a marked degree the coloration of *Hypotaenidia philippensis*, and there can be little doubt that it is derived from a near relation of that species. The curved bill is quite like that of the last-named, while the Macquarie Island Rail is in an intermediate stage, the bill in that form being slightly more curved than in the New Zealand race of *H. philippensis*. It should be noted that this race (*H. p. assimilis*) is characterised by its longer bill and degenerate wing-formation. The bills of *Nesolimnas* and *Cabalus* are, in our opinion, of different origin, but we hope to have more to say regarding these degenerate Rails later.

Genus HYPOTÆNIDIA.

Hypotaenidia Reichenbach, Nat. Syst. Vögel, 1852, p. xxiii.
Type (by original designation): *H. philippensis* (Linné).

Hypotaenidia philippensis assimilis (Gray). New Zealand Buff-banded Rail.

Rallus assimilis Gray, in Dieffenbach's Travels in New Zealand, vol. ii. 1843, p. 197 : North Island.

Synonyms :—

Rallus pictus Potts, Trans. New Zeal. Inst. vol. i. 1872, p. 202 : Okarito, South Island.

Hypotaenidia philippensis Buller, Suppl. vol. i. p. 43 (part.). [The type-locality of *Rallus philippensis* Linné, Syst. Nat. 12th ed. 1766, p. 263, is Philippine Islands.]

Range :—Both Islands (breeding).

Note :—We have not sufficient material to decide whether *Rallus pictus* Potts deserves recognition, but from our studies in this species (Mathews, Birds Austr. vol. i. 1911, pp. 193–199) we anticipate its separation.

Hypotaenidia philippensis macquariensis (Hutton). Macquarie Island Rail.

Rallus macquariensis Hutton, Ibis, 1879, p. 455 : Macquarie Islands.

Range :—Macquarie Islands (breeding).

Genus NESOLIMNAS.

Nesolimnas Andrews, Nov. Zool. vol. iii. 1896, p. 266.

Type (by monotypy) : *N. dieffenbachii* (Gray).

Nesolimnas dieffenbachii (Gray). Chatham Islands' Rail.

Rallus dieffenbachii Gray, in Dieffenbach's Travels in New Zealand, vol. ii. 1843, p. 197 : Chatham Islands.

Synonym :—

Nesolimnas dieffenbachii Buller, Suppl. vol. i. p. 44.

Range :—Formerly Chatham Islands. Now extinct. Unique example in the British Museum (Nat. Hist.).

Genus GALLIRALLUS.

Gallirallus Lafresnaye, Revue Zool. 1841, p. 243.

Type (by monotypy) : *G. brachypterus* Lafresnaye.

Gallirallus australis australis (Sparrman). Brown Wood-Hen.

Rallus australis Sparrman, Museum Carlson. 1786, fasc. i. no. xiv. : Dusky Sound, South Island.

Synonyms :—

Rallus troglodytes Gmelin, Syst. Nat. 1789, p. 713 : Dusky Sound, South Island.

Ocydromus earli Gray, Ibis, 1862, p. 238 : Dusky Sound, South Island ; Buller, Suppl. vol. i. p. 52.

Range :—South Island (breeding).

Gallirallus australis greyi (Buller). North Island Wood-Hen.

Ocydromus greyi Buller, Birds New Zeal. 2nd ed. 1888, p. 105 : North Island.

Synonym :—

Ocydromus greyi Buller, Suppl. vol. i. p. 47.

Range :—North Island (breeding).

Gallirallus australis scotti (Grant). Stewart Island Wood-Hen.

Ocydromus scotti Grant, Bull. Brit. Orn. Club, vol. xv. 1905, p. 78 : Stewart Island.

Range :—Stewart Island (breeding) ; Macquarie Island (introduced).

Gallirallus brachypterus Lafresnaye. Black Wood-Hen.

Gallirallus brachypterus Lafresnaye, Revue Zool., Aug. 1841, p. 243 : Dusky Sound, South Island.

Synonyms :—

Gallirallus fuscus Du Bus, Esquisses Ornith. 1847, pl. ii. : same locality.

Ocydromus nigricans Buller, Trans. New Zeal. Inst. vol. i. 1869, p. 111 : same locality.

? *Ocydromus finschi* Hutton, Trans. New Zeal. Inst. vol. vi. 1874, p. 110 : south-eastern Otago.

Ocydromus brachypterus Buller, Suppl. vol. i. p. 61.

Range :—South-west Coast, South Island (breeding).

Gallirallus hectori (Hutton). South Island Wood-Hen.

Ocydromus hectori Hutton, Trans. New Zeal. Inst. vol. vi. 1874, p. 110: Te Anau, South Island.

Synonyms:—

Ocydromus australis Buller, Suppl. vol. i. p. 58.

Ocydromus hectori id. ib. p. 60.

Range:—South Island (breeding).

Note:—The Wood-Hens of New Zealand constitute a most puzzling group, and though such ornithologists as Buller, Finsch, Newton, Sharpe, and Hutton have all attempted to unravel the puzzle, apparently none ever tried to fix the correct nomenclature to be used for the forms they recognised. When one reads of these authors placing *O. hectori* and *O. brachypterus* as pure synonyms, though one is described as *black*, the other as *yellow*, a great confusion can be anticipated. It is not astonishing, then, to find that the well-known generic name *Ocydromus* is untenable, being pre-occupied (*cf.* Iredale, Nov. Zool. vol. xviii. 1911, p. 22). The next trouble is the correct identification of Sparrman's *Rallus australis*: the description reads "*Corpus supra ferrugineo-fuscum, subtus cinereo-ferrugineum.*"

This is certainly applicable to Forster's *Rallus troglodytes*, which was procured at Dusky Sound. Gmelin's *Rallus troglodytes* is a translation of Latham's Troglodyte Rail (Gen. Synops., Birds, vol. iii. pt. i. p. 229. no. 3). This article is headed "Lev. Mus.," and his description is drawn up from Forster's accounts and agrees fairly well with this Sparrman bird, but a note is added "That in the Leverian Museum has the upper parts of a deep chestnut . . . the underparts cinereous verging to chestnut on the breast." We consider this should be accepted as fixing the form, and consequently Gmelin's *Rallus troglodytes* becomes an absolute synonym of Sparrman's *Rallus australis*. In confirmation of this identification, we find Latham, in his Suppl. Gen. Synops. vol. i. 1787, p. 255, wrote: "The figure in the above work (Sparrman, Mus. Carlson. pl. 14, *Rallus australis*) answers to my description of it (Troglodyte

Rail, Gen. Syn. vol. iii. pt. i. p. 229. no. 3), except that it wants the white streak over the eye." Unfortunately the preceding descriptions do not refer to the bird commonly known as *O. australis*, but to the species recognised as *O. earli* Gray. Finsch and Hutton at times recognised this, but they appear to have been overruled by Buller. In connection with the forms recognised it is worth notice that *G. australis* ranges through the North, South, and Stewart Islands in slightly differentiated subspecific forms.

We have closely studied *G. brachypterus* Lafresnaye, and consider that it is a fixed melanistic form which only occurs in the south-west of the South Island and must consequently be admitted as of specific rank. It shows to us signs of descent from *G. australis*. The common South Island Wood-Hen must for the present bear the name *G. hectori*, which was proposed by Hutton for an alpine form which longer series may show worthy of separation.

It is obvious that here again we have not yet reached the truth as to the distribution and forms of Wood-Hen recognisable in New Zealand. The few specimens we have been able to examine are more misleading than helpful. We write "few" advisedly, as a large number become reduced to few when the extent and nature of New Zealand are considered. A range 12,000 feet high must constitute a big barrier to a flightless bird, while the climate of the plains and south-west ranges differs entirely.

[Genus CREX.

Crex Bechstein, Ornith. Taschenb. vol. ii. 1803, p. 336.

Type (by tautonymy) : *C. crex* (Linné).

Crex crex (Linné). Land-Rail.

Rallus crex Linné, Syst. Nat. 10th ed. 1758, p. 153 : Europe (Sweden).

Synonym :—

Rallus featherstonii Buller, Essay Ornith. New Zeal. 1865, p. 18, footnote : New Zealand.

Range :—New Zealand (one occurrence) ; extralimital.

Note :—At the place cited, Buller described a New Zealand specimen, but since then it has been ignored, but no explanation for its omission given. The recent record of a specimen in New South Wales points to the acceptance of the New Zealand occurrence.]

Genus PORZANA.

Porzana Vieillot, *Analyse nouv. Ornith.* 1816, p. 61.

Type (by monotypy) : *P. porzana* (Linné).

Porzana pusilla affinis (Gray). Marsh-Rail.

Ortygometra affinis Gray, *Voy. 'Erebus' and 'Terror,'* Birds, 1845, p. 14 : Nanganui (*sic*) River, North Island.

Synonym :—

Porzana affinis Buller, *Suppl.* vol. i. p. 63. [The type-locality of *Rallus pusillus* Pallas, *Reise Russ. Reichs*, vol. iii. 1776, p. 700, is Transbaikalia.]

Range :—Both Islands (breeding).

Genus PORZANOIDEA.

Porzanoidea Mathews, *Austral Avian Rec.* vol. i. 1912, p. 117.

Type (by original designation) : *P. immaculata* (Swainson).

Porzanoidea plumbea plumbea (Gray). Swamp-Rail.

Crex plumbea Gray in Griffith's ed. *Cuvier's Animal Kingdom*, vol. iii. 1829, p. 410 : New Zealand.

Synonym :—

Porzana plumbea Buller, *Suppl.* vol. i. p. 63.

Range :—Both Islands (breeding) ; Chatham Islands.

Genus PORPHYRIO.

Porphyrio Bonnaterre, *Tabl. Encycl. Méthod.*, Ornith. vol. i. 1791, p. xciv.

Type (by tautonymy) : *P. porphyrio* (Linné).

Porphyrio melanotus stanleyi Rowley. Swamp-Hen.

Porphyrio stanleyi Rowley, Ornith. Miscell. vol. i. 1875, p. 37 (albino) : New Zealand.

Synonym :—

Porphyrio melanotus Buller, Suppl. vol. i. p. 64, pars. [The type locality of *P. melanotus* Temminck, Manuel d'Ornith. 2nd ed. vol. ii. 1820, p. 701, is New South Wales.]

Range :—Both Islands (breeding).

Porphyrio melanotus chathamensis Sharpe. Chatham Islands' Swamp-Hen.

Porphyrio chathamensis Sharpe, Cat. Birds Brit. Mus. vol. xxiii. 1893, p. 202 : Chatham Islands.

Synonym :—

Porphyrio melanotus Buller, Suppl. vol. i. p. 64, pars.

Range :—Chatham Islands (breeding).

Genus MANTELLORNIS.

Mantellornis Mathews, Birds Australia, vol. i. 1911, p. 249.

Type (by original designation) : *M. hochstetteri* (Meyer).

Mantellornis hochstetteri (Meyer). Takahie.

Notornis hochstetteri Meyer, Abbild. Vögel-Skelet. Lief. iv. & v. 1883, p. 28 : South Island.

Synonym :—

Notornis mantelli Buller, Suppl. vol. i. p. 66.

Range :—South-west coast of South Island. Four specimens only are on record, killed at intervals of seventy years. The first, Dusky Sound, 1849 ; second, Secretary Island, 1857 ; third, eastern shore of Lake Te Anau, 1879 ; fourth, Lake Te Anau shores, 1899. There are credible accounts of specimens having been procured and seen since that date, so that there is not much basis for calling it "extinct," though this certainly will soon be the case.

At the place cited, Mathews has gone fully into the matter of the generic and specific names of this interesting bird, and we are agreed that the name here used is the correct one.

Genus FULICA.

Fulica Linné, Syst. Nat. 10th ed. 1758, p. 152.

Type (by subsequent designation) : *F. atra* Linné.

Fulica atra tasmanica Grant. Eastern Australian Coot.

Fulica tasmanica Grant, Tasm. Journ. Science, vol. ii. 1846, p. 310 : Tasmania.

Synonym :—

Fulica australis Buller, Suppl. vol. i. p. 75. [The type-locality of *Fulica atra* Linné, Syst. Nat. 10th ed. 1758, p. 152, is Sweden, and of *Fulica australis* Gould, Proc. Zool. Soc. 1845, p. 2, is Western Australia.]

Range:—New Zealand (accidental visitor: one occurrence Lake Waihora, South Island, July 1899) : extralimital.

Note :—Buller in the ‘Supplement,’ vol. i. p. 75, included ? *Fulica novaezealandiae* Colenso (Tasm. Journ. Science, 1845, p. 283 : Waikato, North Island), partly on account of Sharpe’s admission of the species in the ‘Hand-list.’ It is quite obvious that neither had studied the description, which is, however, reproduced by Buller, as it is at once obvious that Colenso’s bird was not a Coot and is only applicable, and exactly, to the New Zealand Dabchick (see *post.*).

Order PODICIPIFORMES.

Family PODICIPIDÆ.

Genus PODICEPS.

Podiceps Latham, General Synops. Birds, Suppl. vol. i. 1787, p. 294.

Type (by subs. design.) : *P. cristatus* (Linné).

Note :—In the Novitates Zool. vol. xvii. 1910, p. 494, the usage of *Podiceps* for the Grebes was reviewed by one of us. The method of restriction there utilised in determining the generic names of the Grebes has been questioned, and direct type designation quoted as of more importance. In the Amer. Ornith. Union’s Check-List, 3rd ed. 1910, p. 21, *Colymbus* is used for the Grebes, the type of *Colymbus* Linné, 1758, being given as *Colymbus cristatus* by subsequent designation by the A.O.U. Committee in 1886.

However, in making this designation, the A. O. U. Committee must have overlooked the fact that Gray in the Cat. Gen. & Subgen. Birds, 1855, p. 125, had selected as type of "*Colymbus* Linn. 1735 *nec* 1766, *C. arcticus* Linn."

The direct statement that it is not the type of Linné 1766 but of Linné 1735 necessitates its acceptance as the type of Linné 1758. This is obvious to anyone conversant with Gray's methods of working, and as *C. arcticus* is the first species of *Colymbus* Linné 1758, this must be accepted as the type. We are certain that American ornithologists will now consent to accept this as finally settling a matter which has been a bone of contention for too many years.

Podiceps cristatus australis (Gould). New Zealand Crested Grebe.

Podiceps australis Gould, Proc. Zool. Soc. 1844, p. 135 : New Zealand.

Synonyms :—

Podiceps hectori Buller, Essay New Zeal. Ornith. 1865, p. 19 : New Zealand.

Lophæthya cristata Buller, Suppl. vol. i. p. 76. [The type-locality of *Colymbus cristatus* Linné, Syst. Nat. 10th ed. 1758, p. 135, is Sweden.]

Range :—Both Islands (breeding).

Note :—One of us (Mathews, Birds Austr. vol. i. p. 269) has shown that Gould described the New Zealand bird, which is quite easily separable from the European form.

Genus POLIOCEPHALUS.

Poliocephalus Selby, Cat. Gen. Subgen. Types Aves. 1840, p. 47.

Type (by monotypy) : *P. poliocephalus* (Jardine & Selby).

Poliocephalus rufpectus Gray. New Zealand Dabchick.

Podiceps (Poliocephalus) rufpectus Gray in Dieffenbach's Travels in New Zealand, vol. ii. 1843, p. 119 : North Island.

Synonyms :—

Fulica novæzealandiæ Colenso, Tasm. Journ. Sci. vol. ii. 1845, p. 283 : North Island.

Podiceps rufpectus Buller, Suppl. vol. i. p. 76.

Range :—Both Islands (breeding).

Order SPHENISCIFORMES.

Family SPHENISCIDÆ.

Genus APTENODYTES.

Aptenodytes Miller, Var. Subj. Nat. Hist. 1778, pl. 23.

Type (by monotypy) : *A. patagonica* Miller.

Aptenodytes patagonica halli Mathews. King Penguin.

Aptenodytes patagonica halli Mathews, Birds Austr. vol. i. 1911, p. 272 ; Macquarie Island.

Synonym :—

Aptenodytes patagonica Buller, Suppl. vol. i. p. 78. [The type-locality of *Aptenodytes patagonica* Miller, *loc. cit.*, is South Georgia.]

Range :—New Zealand Seas ; Macquarie Island (breeding).

Genus PYGOSCELIS.

Pygoscelis Wagler, Isis, 1832, p. 281.

Type (by monotypy) : *P. papua* (Forster).

Pygoscelis papua tæniata (Peale). Rock-Hopper.

Aptenodytes tæniata Peale, U.S. Expl. Exped., Birds, 1848, p. 264 : Macquarie Island.

Synonym :

Pygoscelis papua Buller, Suppl. vol. i. p. 84. [The type-locality of *Aptenodytes papua* Forster, Comment. Gütting. vol. iii. 1781, p. 140, is Falkland Islands.]

Range :—Macquarie Islands (breeding).

Genus EUDYPTES.

Eudyptes Vieillot, Analyse nouv. Ornith. 1816, pp. 67, 70.

Type (by subsequent designation) : *E. chrysocome* (Forster).

Note :—When one of us (Mathews) in 'The Birds of Australia,' vol. i. 1911, p. 276, used *Penguinus* Brünnich to replace *Catarractes* Brisson (non-binomial), the reviewer, "J. A. A.," in 'The Auk' (vol. xxix. 1912, p. 124), wrote :
"If *Penguinus* was founded on an indeterminable species,

the genus itself must necessarily share the fate of the species on which it was founded." With this dictum we agree and would note that in rejecting *Penguinus*, recourse cannot be had to *Catarractes* (ex Brisson), as that genus is absolutely coequal with *Penguinus*. The next name is *Eudyptes* Vieillot, which was introduced with two sections, and the second of these was designated as type by Gray in 1840 : the first section being equal to *Spheniscus*. We have therefore to revert to the familiar *Eudyptes* for the Crested Penguins.

Eudyptes chrysocome chrysocome (Forster). Crested Penguin.

Aptenodytes chrysocome Forster, Comment. Götting. vol. iii. 1781, p. 135 : Tasmania.

Synonyms :—

Pinguinaria cirrhata Shaw in Miller's *Cimelia Physica*, 1796, p. 92 : same bird.

Aptenodytes cristata Miller, id. ib. pl. xlix. : same bird.

? *Eudyptes vittata* Finsch, Ibis, 1875, p. 113 : Dunedin.

Catarrhactes chrysocome Buller, Suppl. vol. i. p. 84.

? *Catarrhactes vittatus* Buller, Suppl. vol. i. p. 95.

Range :—New Zealand (? breeding on the south-west coast) ; Antipodes Island (breeding) ; ? Macquarie Island (breeding).

Eudyptes chrysocome pachyrhynchus Gray. Victoria Penguin.

Eudyptes pachyrhynchus Gray, Voy. 'Erebus' and 'Terror,' Birds, 1845, p. 17 : Waikowaiti, South Island.

Synonyms :—

Eudyptes atrata Finsch, Ibis, 1875, p. 114 : Snares Island.

Catarrhactes pachyrhynchus Buller, Suppl. vol. i. p. 86.

Range :—New Zealand Seas ; Snares Island (breeding).

Eudyptes chrysocome sclateri Buller. Big-crested Penguin.

Eudyptes sclateri Buller, Birds New Zeal. 2nd ed. vol. ii. 1888, p. 289 : Auckland Islands.

Synonym :—

Catarrhactes sclateri Buller, Suppl. vol. i. p. 88.

Range :—New Zealand Seas ; Auckland Island (breeding) ; ? Bounty Island (breeding).

Eudyptes chrysocome filholi Hutton. Campbell Island
Crested Penguin.

Eudyptes filholi Hutton, Proc. Linn. Soc. N.S.W. vol. iii.
1878, p. 334: Campbell Island.

Range :—Campbell Island (breeding).

Eudyptes schlegeli Finsch. Macaroni Penguin.

Eudyptes schlegeli Finsch, Trans. New Zeal. Inst. vol. viii.
1876, p. 204: Macquarie Island.

Synonyms :—

Eudyptes albigularis Milne-Edwards, Ann. Sci. Nat. Paris, ser. vi.
vol. ix. 1880, p. 55: Macquarie Island.

Catarrhactes schlegeli Buller, Suppl. vol. i. p. 90.

? *Catarrhactes chrysolophus* Buller, Suppl. vol. i. p. 94.

Range : New Zealand Seas; Macquarie Island (breeding).

Note :—A careful reading of Buller's 'Supplement' clearly shows the confusion in which the forms of Penguins stand. Material is not available for a thorough revision of the group; while Waite, in the 'Birds of the Subantarctic Islands of New Zealand' (vol. ii. 1909, pp. 576–580), made confusion worse confounded, the reason being fully explained by the author's introductory note (p. 551): "While on the islands I did not pay the special attention to the birds I would have done had I known what would later have been required of me . . . consequently I have little material for purposes of identification or description." It would seem from Buller's very mixed accounts (such sentences occurring on the same page about the same birds as this, "It has never, I believe, been found on the Auckland Islands . . . Of this species, hitherto only known as occurring on the Auckland Islands.") that each breeding-place is probably occupied by a distinct subspecies. Series are required to work out these birds, and a beautiful paper by Milne-Edwards (cited above) appears to have been somewhat overlooked. In that he showed that Filhol's series from the Campbell Islands were constant, and constituted a recognisable subspecies. The Macquarie Island *P. schlegeli* is the New Zealand representative (but seemingly specifically distinct) of the Falkland

Island *P. chrysolophus*, and Buller's records of that species may have been reversionary cases.

Genus MEGADYPTES.

Megadyptes Milne-Edwards, Ann. Sci. Nat. Paris, ser. vi. vol. ix. 1880, p. 56.

Type (by monotypy) : *M. antipodes* (Hombron & Jacquinot).

Megadyptes antipodes (Hombron & Jacquinot). Yellow-crowned Penguin.

Catarrhactes antipodes Hombron & Jacquinot, Ann. Sci. Nat. 2nd ser. vol. xvi. 1841, p. 320 : Auckland Islands.

Synonyms :

Aptenodytes flavilavata Peale, U.S. Expl. Exped., Birds, 1848, p. 260 : Auckland Islands.

Megadyptes antipodum Buller, Suppl. vol. i. p. 94.

Range :—South Island (Otago, breeding) ; Auckland Islands (breeding) ; Campbell Islands (breeding).

Genus EUDYPTULA.

Eudyptula Bonaparte, Comptes Rendus Sci. Paris, vol. xlii. 1856, p. 775.

Type (by monotypy) : *E. minor* (Forster).

Eudyptula minor minor (Forster). Blue Penguin.

Aptenodytes minor Forster, Comment. Götting. vol. iii. 1781, p. 147 : Dusky Sound, South Island.

Synonym :

Eudyptula undina Buller, Suppl. vol. i. p. 96.

Range : Both Islands (breeding).

Eudyptula minor albesignata Finsch. White-flipped Penguin.

Eudyptula albosignata Finsch, Proc. Zool. Soc. 1874, p. 207 : Akaroa, South Island.

Synonym :

Eudyptula minor Buller, Suppl. vol. i. p. 96.

Range : South Island (Banks' Peninsula, breeding).

Eudyptula minor iredalei Mathews. Chatham Islands' Little Penguin.

Eudyptula minor iredalei Mathews, Birds Australia, vol. i. 1911, p. 286, pl. 67 : Chatham Islands.

Range : Chatham Islands (breeding).

Order PROCELLARIIFORMES.

Family HYDROBATIDÆ.

Genus OCEANITES.

Oceanites Keyserling & Blasius, Wirbelth. Europa's, 1840, p. xciii.

Type (by monotypy) : *O. oceanicus* (Kuhl).

Oceanites oceanicus exasperatus Mathews. Australian Yellow-webbed Storm-Petrel.

Oceanites oceanicus exasperatus Mathews, Birds Austr. vol. ii. 1912, p. 11 : New Zealand Seas.

Synonym :—

Oceanites oceanicus Buller, Suppl. vol. i. p. 97. [The type-locality of *Procellaria oceanica* Kuhl, Beitr. Zool. Vergl. Anat. 1820, p. 136, is South Atlantic Ocean.]

Range :—New Zealand Seas : Cape Adare, Victoria Land (breeding).

Genus GARRODIA.

Garrodia Forbes, Proc. Zool Soc. 1881, p. 735.

Type (by monotypy) : *G. nereis* (Gould).

Garrodia nereis nereis (Gould). Grey-backed Storm-Petrel.

Thalassidroma nereis Gould, Proc. Zool. Soc. for 1840, 1841, p. 178 : Bass's Straits, Australia.

Synonym :—

Garrodia nereis Buller, Suppl. vol. i. p. 98.

Range :—New Zealand (breeding); Chatham Islands (breeding); Auckland Islands (breeding).

Genus PEALEA.

Pealea Ridgway, Auk, vol. iii. 1886, p. 334.

Type (by original designation) : *P. lineata* (Peale).

Pealea lineata (Peale). Samoan Storm-Petrel.

Thalassidroma lineata Peale, United States Expl. Exped., Birds, 1848, p. 293 : Island of Upolu.

Range :—New Zealand Seas. (Two specimens only known from New Zealand waters : one obtained off East Cape, North Island in 1829 by the 'Astrolabe' Expedition ; the other off Banks' Peninsula, South Island, presented to the British Museum. May breed off New Zealand?)

Genus PELAGODROMA.

Pelagodroma Reichenbach, Nat. Syst. Vögel, 1852, p. iv.

Type (by original designation) : *P. marina* (Latham).

Pelagodroma marina maoriana Mathews. New Zealand White-faced Storm-Petrel.

Pelagodroma marina maoriana Mathews, Birds Austr. vol. ii. 1912, p. 24 : Chatham Islands.

Synonym :—

Pelagodroma marina Buller, Suppl. vol. i. p. 98. [The type-locality of *Procellaria marina* Latham, Index Ornith. vol. ii. 1790, p. 826, is South Atlantic Ocean.]

Range :—New Zealand : Chatham Islands (breeding) ; Auckland Islands (breeding) ; ? Kermadec Islands.

Genus FREGETTA.

Fregetta Bonaparte, Comptes Rendus Sci. Paris, vol. xli. 1855, p. 1113.

Type (by original designation) : *F. leucogaster* (Gould).

Fregetta tropica melanogaster (Gould). Black-bellied Storm-Petrel.

Thalassidroma melanogaster Gould, Annals Mag. Nat. Hist. vol. xiii. 1844, p. 367 : South Indian Ocean.

Synonym :—

Fregetta melanogaster Buller, Suppl. vol. i. p. 99. [The type-locality of *Thalassidroma tropica* Gould, Annals Mag. Nat. Hist. vol. iii. 1844, p. 366, is Equatorial Atlantic Ocean.]

Range :—New Zealand Seas ; Australian Seas and South Indian Ocean.

Note :—The breeding-place of the New Zealand form is yet unknown, though probably the Chatham Islands (*cf.* Buller, Birds New Zeal. 1873, p. 319) harbours a subspecies quite distinct from the South Indian Ocean bird (Mathews, Birds Austr. vol. ii. 1912, p. 36).

Family PROCELLARIIDÆ.

Genus REINHOLDIA.

Reinholdia, Mathews, Austral Avian Record, vol. i. 1912, p. 107.

Type (by original designation): *R. reinholdi* (Mathews).

Reinholdia reinholdi reinholdi (Mathews). Brown-backed Petrel.

Puffinus reinholdi reinholdi Mathews, Birds Austr. vol. ii. 1912, p. 74: New Zealand (Hauraki Gulf).

Synonym :—

Puffinus gavia Buller, Suppl. vol. i. p. 99.

Range :—New Zealand (breeding) ; New South Wales (twice).

Note :—Much confusion exists regarding the distribution of this bird. Reischek (Trans. New Zeal. Inst. vol. xviii. 1886, p. 94) gives an account of a bird breeding on Hauturu Island, while Sandager (*op. cit.*, vol. xxii. 1890, p. 289) records rather different habits for the same (?) bird breeding on the Mokohinou Islands; finally Buller wrote in the Supplement "We have *at length* discovered the breeding-place of this species, viz. Stephen's Island, Cook's Straits," and then on p. 104 records this same Stephen's Island breeding bird under the name *Puffinus tenuirostris* (Bonaparte's Shearwater); this must be absolutely wrong.

Reinholdia reinholdi huttoni (Mathews). Snares Brown-backed Petrel.

Puffinus reinholdi huttoni Mathews, Birds Austr. vol. ii. 1912, p. 77 : Snares Island.

Range :—Snares Island (breeding) ; South Australia (one occurrence).

Genus PUFFINUS.

Puffinus Cuvier, Règne Animal, vol. i. 1816, p. 516.

Type (by tautonymy) : *P. puffinus* (Brünnich).

Puffinus assimilis assimilis Gould. Allied Petrel.

Puffinus assimilis Gould, Synops. Birds Austr. pt. iv. 1838, App. p. 7 : Norfolk Island.

Synonyms :—

Puffinus affinis Penny Cyclopaedia, vol. xviii. 1840, p. 42. Error for *P. assimilis*.

Puffinus australis Gould, Birds Austr. vol. vii. 1848, text to pl. 59 : Norfolk Island.

Puffinus assimilis Buller, Suppl. vol. i. p. 100 (part only).

Range :—Kermadec Islands (breeding) ; Norfolk Island (breeding) ; Lord Howe Island (breeding).

Puffinus assimilis gavia (Forster). New Zealand Allied Petrel.

Procellaria gavia Forster, Descr. Anim. ed. Licht. 1844, p. 148 : Queen Charlotte's Sound, South Island.

Synonym :—

Puffinus assimilis Buller, Suppl. vol. i. p. 100 (in part).

Range :—New Zealand (breeding).

Note :—One of us (Mathews, Birds Austr. vol. ii. 1912, pp. 50–77) has gone carefully into the matter of the “black and white” Shearwaters, and has clearly shown the misapplication of Forster's name. When Hutton (Cat. Birds New Zeal. 1871, pp. 45 & 79) first utilised it, he had no knowledge that a form of *P. assimilis* inhabited New Zealand, and the misapplication has been continuous, even when specimens of the latter species were obtained at the type locality of Forster's species. The notes under the

species of the genus *Puffinus* in Buller's 'Supplement,' vol. i. pp. 99–105, are in hopeless confusion, and no reliance can be placed upon them as being referable to the species they are recorded against.

Puffinus assimilis kempi Mathews. Chatham Islands' Allied Petrel.

Puffinus assimilis kempi Mathews, Birds Austr. vol. ii. 1912, p. 69: Chatham Islands.

Range:—Chatham Islands (breeding).

Puffinus bulleri Salvin. Ashy-backed Wedge-tailed Petrel.

Puffinus bulleri Salvin, Ibis, 1888, p. 354: New Zealand.

Synonyms:—

Puffinus zealandicus Sandager, Trans. New Zeal. Inst. vol. xxii. 1890, p. 291: Mokohinou Island.

Puffinus bulleri Buller, Suppl. vol. i. p. 101.

Range:—New Zealand Seas. Breeding-place unknown.

Puffinus pacificus pacificus (Gmelin). Kermadec Wedge-tailed Petrel.

Procellaria pacifica Gmelin, Syst. Nat. 1789, p. 560: Pacific Ocean, breeding at Kermadec Islands.

Synonyms:—

Puffinus chlororhynchus iredali Mathews, Bull. Brit. Orn. Club, vol. xxvii. 1910, p. 40: Kermadec Islands.

Puffinus chlororhynchus Buller, Suppl. vol. i. p. 105.

Range:—Kermadec Islands (breeding).

Note:—Mathews (Birds Austr. vol. ii. 1912, p. 79) has given full particulars regarding this synonymy.

Puffinus griseus griseus (Gmelin). Sombre Petrel or Mutton-Bird.

Procellaria grisea Gmelin, Syst. Nat. 1789, p. 564: New Zealand.

Synonyms:—

Procellaria tristis Forster, Descr. Anim. ed. Licht. 1844, p. 205: New Zealand.

Puffinus griseus Buller, Suppl. vol. i. p. 102.

Range:—New Zealand (breeding), probably not in North

Island ; ? Chatham Islands ; ? Auckland Islands ; ? Snares.
The exact distribution needs working out.

***Puffinus carneipes carbonarius* Mathews.** New Zealand Flesh-footed Petrel.

Puffinus carneipes carbonarius Mathews, Birds Austr. vol. ii. 1912, pp. 90-91 : off Three Kings, North Island.

Synonym :—

Puffinus carneipes Buller, Suppl. vol. i. p. 103. [The type-locality of *Puffinus carneipes* Gould, Annals Mag. Nat. Hist. vol. xiii. 1844, p. 365, is south-western Australia.]

Range :—New Zealand (breeding) ; ? North Island only.

***Puffinus tenuirostris brevicauda* Gould.** Short-tailed Petrel.

Puffinus brevicaudus Gould, Birds Austr. vol. vii. 1847, pl. 56 : Green Island, Bass's Straits.

Synonym :—

? *Puffinus tenuirostris* Buller, Suppl. vol. i. p. 104. [The type-locality of *Procellaria tenuirostris* Temminck & Laugier, Planch. Color. d'Ois. 99^e livr. 1836, pl. 58, is Japanese Seas.]

Range :—New Zealand Seas (accidental occurrences) ; Southern Australia (breeding).

Note :—It is very doubtful whether this species has occurred in New Zealand waters. Buller's notes in the 'Supplement' do *not* refer to this bird, but Hutton's record (Proc. Zool. Soc. 1893, p. 749) of a washed-up Kermadec specimen may belong here. No authentic record of its breeding in New Zealand is to be found.

In the Suppl. vol. i. p. 100 is included *Puffinus obscurus*. One of us (Mathews, Birds Austr. vol. ii. 1912, pp. 62 & 73) has dealt with the specimen upon which the entry is based and has suggested that there may be a breeding-form of *Puffinus therminieri* in New Zealand, but no specimens are at hand and the history of the supposed New Zealand bird is unreliable. We are, therefore, compelled to omit it, but would again draw attention to the need of investigating the breeding-colonies of the 'black and white' Shearwaters around New Zealand.

Genus PROCELLARIA.

Procellaria Linné, Syst. Nat. 10th ed. 1758, p. 131.

Type (by subsequent designation): *P. æquinoctialis* Linne

Procellaria æquinoctialis *steadi* Mathews. New Zealand
White-chinned Petrel.

Procellaria æquinoctialis *steadi* Mathews, Birds Austr.
vol. ii. 1912, p. 114: Antipodes Island.

Synonym:—

Majaqueus æquinoctialis Buller, Suppl. vol. i. p. 109. [The type-
locality of *Procellaria æquinoctialis* Linné, Syst. Nat. 10th ed.
1758, p. 132, is Cape Seas.]

Range:—Antipodes and Auckland Islands (breeding).

Procellaria parkinsoni Gray. Black Petrel.

Procellaria parkinsoni Gray, Ibis, 1862, p. 245: New
Zealand.

Synonym:—

Majaqueus parkinsoni Buller, Suppl. vol. i. p. 109.

Range:—New Zealand (breeding), both islands.

Genus PRIOFINUS.

Priofinus Hombron & Jacquinot, Comptes Rendus Sci.
Paris, vol. xviii. 1844, p. 355.

Type (by monotypy): *P. cinereus* (Gmelin).

Priofinus cinereus (Gmelin). Grey Petrel.

Procellaria cinerea Gmelin, Syst. Nat. 1789, p. 563: New
Zealand Seas (lat. 48° S.).

Synonyms:—

Procellaria gelida Gmelin, Syst. Nat. 1789, p. 546: same locality.

Procellaria melanura Bonnaterre, Tabl. Encycl. Méthod., Ornith.
vol. i. 1790, p. 79: same locality.

Procellaria hâsitata Forster, Descr. Anim. ed. Licht. 1844, p. 208:
same locality.

Adamastor typus Bonaparte, Consp. Gen. Av. vol. ii. 1857, p. 187:
new name for preceding.

Procellaria adamastor Schlegel, Mus. Pays-Bas, vol. vi. Procell.
1863, p. 23 : another name for same form.

(The preceding synonymy has been fully explained in Mathews' Birds Austr. vol. ii. 1912, p. 121.)

Priofinus cinereus Buller, Suppl. vol. i. p. 106.

Range:—New Zealand Seas (scarce straggler), extra-limital.

Genus PRIOCELLA.

Priocella Hombron & Jacquinot, Comptes Rendus Sci. Paris, vol. xviii. 1844, p. 357.

Type (by monotypy) : *P. antarctica* (Stephens).

Priocella antarctica (Stephens). Silver-grey Petrel.

Fulmarus antarcticus Stephens in Shaw's Gen. Zool. vol. xiii. 1826, p. 236 : Cape Seas.

Synonyms:—

Procellaria glacialoides Smith, Illus. Zool. South Afr., Aves, 1840, pl. 51 : Cape Seas.

Priocella garnotii Hombron & Jacquinot, Comptes Rendus Sci. Paris, vol. xviii. 1844, p. 357 : same locality.

Thalassoica polaris Bonaparte, Consp. Gen. Av. vol. ii. 1857, p. 192 : nomen nudum.

Procellaria smithi Schlegel, Mus. Pays-Bas, vol. vi. Procell. 1863, p. 22 : new name for same bird.

Priocella glacialoides Buller, Suppl. vol. i. p. 108.

Range:—New Zealand Seas (scarce straggler); extra-limital.

Genus PTERODROMA.

Pterodroma Bonaparte, Comptes Rendus Sci. Paris, vol. xlii. 1856, p. 768.

Type (by subsequent designation) : *P. macroptera* (Smith).

Pterodroma macroptera gouldi (Hutton). New Zealand Grey-faced Petrel.

Æstrelata gouldi Hutton, Ibis, 1869, p. 351 : New Zealand.

Synonyms :—

Æstrelata gouldi Buller, Suppl. vol. i. p. 111.

Æstrelata fuliginosa Buller, Suppl. vol. i. p. 118. [The type-locality of *Procellaria macroptera* Smith, Illus. Zool. South Afr., Aves, 1840, pl. 52, is Cape Seas.]

Range :—New Zealand (breeding).

Note :—Mathews (Birds Austr. vol. ii. 1912, p. 130) has clearly shewn that *Pterodroma* must be used instead of the more familiar *Æstrelata*.

Pterodroma lessonii leucocephala (Forster). Eastern White-headed Petrel.

Procellaria leucocephala Forster, Descr. Anim. ed. Licht. 1844, p. 206 : Australian Seas.

Synonym :—

Æstrelata lessoni Buller, Suppl. vol. i. p. 111. [The type-locality of *Procellaria lessonii* Garnot, Ann. Sci. Nat. Paris, vol. vii. 1826, p. 54, footnote, is Cape Horn.]

Range :—New Zealand Seas ; Antipodes Island (breeding) ; Auckland Islands (breeding).

Note :—In the Suppl. vol. i. p. 112, Buller included *Æstrelata incerta* with the remark, “The ‘Doubtful Petrel’ having been finally accepted by Mr. Salvin may now be regarded as a valid species. But, apart from this fact, I fear I have nothing to add to its history, no further New Zealand specimens having come to my knowledge.” No authentic specimens have ever been procured in New Zealand waters, nor is it likely that any ever will be, seeing that *P. incerta* Schlegel is a South Atlantic species with, as far as is yet known, a quite restricted habitat. One of us (Mathews, Birds Austr. vol. ii. pp. 149–151, 1912) has detailed the history of the names *P. alba* Gmelin and *P. sandaliata* Solander, and has come to the conclusion that they are both founded on the same specimen and refer to this species ; as a consequence, the correct name would be *P. alba* (Gmelin), but it must be omitted from the New Zealand list, as was pointed out by Finsch (Trans. New Zeal. Inst. vol. vii. 1875, p. 233) almost forty years ago.

Pterodroma neglecta neglecta (Schlegel). Kermadec Islands' Petrel.

Procellaria neglecta Schlegel, Mus. Pays-Bas, vol. vi. Procell. 1863, p. 10 : Kermadec Islands.

Synonyms :—

Æstrelata leucophrys Hutton, Proc. Zool. Soc. 1893, p. 752, pl. lxiii. : Kermadec Islands.

Æstrelata mollis Buller, Suppl. vol. i. p. 112.

Æstrelata neglecta id. ib. p. 115.

Æstrelata phillipi id. ib. p. 119.

Range :—Kermadec Islands (breeding).

Note :—There is considerable confusion regarding this species in Buller's Supplement, as can be seen from the above synonymy. The notes under (*E. mollis* (save this, "I have another example in my collection from Otago") refer to this species; the bird noted (p. 113) is also not referable to *E. mollis*. The matter under (*E. neglecta* all refers to this species, but Buller quotes conflicting accounts without comment, while under *E. phillipi* he includes a note by Hutton written in 1893, though Hutton had retracted his recognition later and this is quoted on p. 116. One of us (Iredale, Proc. Linn. Soc. N.S.W. vol. xxxv. 1910, p. 780, 1911) has shown that *P. phillipi* Gray could not be used for this bird; and more recently the other (Mathews, Birds Austr. vol. ii. 1912, p. 141 *et seq.*) has shown the true value of that name.

Pterodroma externa cervicalis (Salvin). Sunday Island Petrel.

Æstrelata cervicalis Salvin, Ibis, 1891, p. 192 : Kermadec Islands.

Synonym :—

Æstrelata cervicalis Buller, Suppl. vol. i. p. 114. [The type-locality of *Æ. externa* Salvin, Ibis, 1875, p. 373, is Mas-a-fuera of the Juan Fernandez group.]

Range :—Kermadec Islands (breeding).

Pterodroma inexpectata inexpectata (Forster). Mottled Petrel.

Procellaria inexpectata Forster, Descr. Anim. ed. Licht. 1844, p. 204.

Synonyms:—

Procellaria gularis Peale, United States Expl. Exped. 1848, p. 299: lat. 68° S., long. 95° W.

Procellaria affinis Buller, Trans. New Zealand Inst. vol. vii. 1875, p. 215: Pott. River, Otago.

Procellaria lugens Solander, cf. Mathews, Birds Austr. vol. ii. 1912, p. 159: lat. 59°, south of Tierra del Fuego.

Æstrelata gularis Buller, Suppl. vol. i. p. 117.

Range:—New Zealand (breeding).

Genus COOKILARIA.

Cookilaria Bonaparte, Comptes Rendus Sci. Paris, vol. xliii. 1856, p. 994.

Type (by subsequent designation): *C. cookii* (Gray).

Cookilaria cookii cookii (Gray). Blue-footed Petrel.

Procellaria cookii Gray in Dieffenbach's Travels in New Zealand, vol. ii. 1843, p. 199: New Zealand.

Synonym:—

Æstrelata cooki Buller, Suppl. vol. i. p. 118.

Range:—New Zealand (breeding), ? both Islands.

Cookilaria cookii axillaris (Salvin). Chatham Islands' Blue-footed Petrel.

Æstrelata axillaris Salvin, Bull. Brit. Orn. Club, vol. i. 1893, p. xxxiii: Chatham Islands.

Synonym:—

Æstrelata axillaris Buller, Suppl. vol. i. p. 119.

Range:—Chatham Islands (breeding).

Cookilaria cookii nigripennis (Rothschild). Kermadec Blue-footed Petrel.

Æstrelata nigripennis Rothschild, Bull. Brit. Orn. Club, vol. i. 1893, p. lvii: Kermadec Islands.

Synonym :—

Æstrelata nigripennis Buller, Suppl. vol. i. p. 113.

Range :—Kermadec Islands (breeding).

Genus MACRONECTES.

Macronectes Richmond, Proc. Biol. Soc. Wash. vol. xviii. 1906, p. 76.

Type (by original designation) : *M. giganteus* (Gmelin).

Macronectes giganteus albus (Potts). New Zealand Giant Petrel.

Ossifraga alba Potts, Trans. New Zeal. Inst. vol. vi. 1874, p. 152 : off Centre Island, Foveaux Straits, South Island, New Zealand.

Synonym :—

Ossifraga gigantea Buller, Suppl. vol. i. p. 120 (part.).

Range :—New Zealand Seas, Chatham Islands (? breeding) ; Antipodes Islands and Campbell Islands (? breeding).

Macronectes giganteus wilsoni Mathews. Antarctic Giant Petrel.

Macronectes giganteus wilsoni Mathews, Birds Austr. vol. ii. 1912, p. 189 : Ross Sea, Antarctica.

Synonym :—

Ossifraga gigantea Buller, Suppl. vol. i. p. 120 (part.). [The type-locality of *Procellaria gigantea* Gmelin, Syst. Nat. 1789, p. 563, is Staten Island off Cape Horn.]

Range :—Antarctic Seas (? Macquarie Island, breeding).

Note :—There is a form of *Macronectes giganteus* breeding at the Macquarie Islands, and specimens from that locality agree better with the Antarctic form than with the New Zealand race, so that for the present we refer them to the former.

Genus DAPTION.

Daption Stephens in Shaw's Gen. Zool. vol. xiii. pt. i. 1826, p. 239.

Type (by original designation) : *D. capense* (Linné).

Daption capense (Linné). Cape Petrel.

Procellaria capensis Linné, Syst. Nat. 10th ed. 1758, p. 132 : Cape of Good Hope.

Synonym :—

Procellaria pardela Oken, Lehrb. für Naturg. vol. iii. Zool. 1816, p. 533 : Cape Seas.

Daption capensis Buller, Suppl. vol. i. p. 122.

Range :—New Zealand Seas ; ? Snares Island (breeding) ; extralimital.

Genus THALASSOICA.

Thalassoica Reichenbach, Nat. Syst. Vögel, 1852, p. xiv.

Type (by original designation) : *T. antarctica* (Gmelin).

Thalassoica antarctica (Gmelin). Antaretic Petrel.

Procellaria antarctica Gmelin, Syst. Nat. 1789, p. 565 : in the Antaretic Circle.

Synonym :—

Thalassæca antarctica Buller, Suppl. vol. i. p. 108.

Range :—New Zealand Seas (? one occurrence) ; extralimital.

Genus HALOBÆNA.

Halobæna Bonaparte, Comptes Rendus Sci. Paris, vol. xlii. 1856, p. 768.

Type (by monotypy) : *H. cærulea* (Gmelin).

Halobæna cærulea (Gmelin). Blue Petrel.

Procellaria cærulea Gmelin, Syst. Nat. 1789, p. 560 : Southern Ocean.

Synonyms :—

Procellaria forsteri (not Latham) Smith, Ill. Zool. South Africa, 1840, pl. liii. : Cape Seas.

Procellaria similis Forster, Descr. Anim. ed. Licht. 1844, p. 59 : Southern Ocean.

Halobæna cærulea Buller, Suppl. vol. i. p. 122.

Range :—New Zealand Seas (two occurrences : Cape Campbell, South Island ; North Island) ; extralimital.

Genus PACHYPTILA*.

Pachyptila Illiger, Prodrum, 1811, p. 274.

Type (by subsequent designation) : *P. vittatus* (Gmelin).

Pachyptila vittatus vittatus (Gmelin). New Zealand Broad-billed Prion.

Procellaria vittata Gmelin, Syst. Nat. 1789, p. 560 : New Zealand.

Synonyms :—

Procellaria forsteri Latham, Index Ornith. vol. ii. 1790, p. 827 : new name for *P. vittata* Gmelin.

Procellaria latirostris Bonaterre, Tabl. Encycl. Méthod., Orn. vol. i. 1791, p. 81 : New Zealand.

Prion magnirostris Gould, Proc. Zool. Soc. 1862, p. 125 : New Zealand.

Prion australis Potts, Ibis, 1873, p. 85 : Foveaux Straits, South Island.

Prion vittatus Buller, Suppl. vol. i. p. 123.

Range :—New Zealand Seas : Chatham Islands (breeding) ; Foveaux Straits (breeding) ; Dusky Sound, South Island (breeding).

Genus PSEUDOPRION.

Pseudoprion Coues, Proc. Acad. Nat. Sci. Philad. 1866, p. 164.

Type (by original designation) : *P. turtur* (Kuhl).

Pseudoprion turtur huttoni Mathews. Dove-Petrel.

Pseudoprion turtur huttoni Mathews, Birds Austr. vol. ii. 1912, p. 220 : Chatham Islands.

Synonyms :—

Prion desolatus Buller, Suppl. vol. i. p. 124.

Prion brevirostris Buller, Suppl. vol. i. p. 125.

Prion ariel Buller, Suppl. vol. i. p. 126. [The type-locality of *Procellaria turtur* Kuhl, Beitr. Zool. vergl. Anat. 1820, p. 143 is Bass' Straits, from which locality *Halobæna typica* Bonaparte, Consp. Gen. Av. vol. vi. Procell. p. 18, 1863, was also described ; while *Prion brevirostris* Gould, Proc. Zool. Soc. 1855, p. 88, is supposed to have come from Madeira (cf. Mathews, loc. cit.)]

Range :—New Zealand Seas : Chatham Islands (breeding) ;

* *Prion* Lacepède, Tableau Oiseaux, 1799, p. 14, is indeterminate.

? Stephens Island (breeding); ? Antipodes Island (breeding).

Pseudoprion turtur crassirostris Mathews. Bounty Islands Dove-Petrel.

Pseudoprion turtur crassirostris Mathews, Birds Austr. vol. ii. 1912, p. 221 : Bounty Island.

Range: Bounty Island (breeding); ? Snares (breeding).

Genus HETEROPRION.

Heteroprion Mathews, Birds Austr. vol. ii. 1912, p. 222.

Type (by original designation): *H. belcheri* Mathews.

Heteroprion desolatus alter Mathews. Auckland Islands' Dove-Petrel.

Heteroprion desolatus alter Mathews, Birds Austr. vol. ii. 1912, p. 227 : Auckland Islands.

Synonym:—

Prion banksi Buller, Suppl. vol. i. p. 124. [The type-locality of *Procellaria desolata* Gmelin, Syst. Nat. 1789, p. 562, is Kerguelen Island.]

Range:—New Zealand Seas, Auckland Islands (breeding).

Heteroprion desolatus macquariensis Mathews. Macquarie Islands' Dove-Petrel.

Heteroprion desolatus macquariensis Mathews, Birds Austr. vol. ii. 1912, p. 227 : Macquarie Islands.

Range:—Macquarie Islands (breeding).

Family PELECANOIDIDÆ.

Genus PELECANOIDES.

Pelecanoides Lacepède, Tableau Oiseaux, 1799, p. 13.

Type (by monotypy): *P. urinatrix* (Gmelin).

Pelecanoides urinatrix urinatrix (Gmelin). Diving Petrel.

Procellaria urinatrix Gmelin, Syst. Nat. 1789, p. 560 : Queen Charlotte's Sound, South Island.

Synonyms :—

Procellaria tridactyla Forster, Descr. Anim. ed. Licht., 1844, p. 149: Queen Charlotte's Sound, South Island.

Pelecanoides urinatrix Buller, Suppl. vol. i. p. 126.

Pelecanoides exsul id. ib. p. 127. [*Pelecanoides exsul* was described from Kerguelen Island by Salvin (Cat. Birds Brit. Mus. vol. xxv. 1896, p. 438) and must be restricted to the form of *P. urinatrix* nesting on that island.]

Range :—New Zealand (breeding).

Note :—Buller constantly recognised two forms of Diving Petrel as breeding in New Zealand. His latest acceptance gave the following discontinuous distribution :—Smaller form, North and South Islands, Chatham Island and Snares ; larger form, Stephens Island, South Island, Karewa Island, North Island, and Auckland Island. Examination of specimens supposedly from New Zealand suggests the occurrence of more than one form, but sufficient authentic material is not at hand to diagnose these, and limit their ranges. The second name chosen by Buller is not available, as shown above, and neither is *Procellaria berard* proposed by Quoy and Gaimard (Voy. 'Uranie' et 'Physic,' Zool. vol. i. 1824, p. 135), which was introduced for the Falkland Island bird (*cf.* Mathews, Birds Austr. vol. ii. 1912, pp. 231–239).

Family DIOMEDEIDÆ.

Genus DIOMEDEA.

Diomedea Linné, Syst. Nat. 10th ed. 1758, p. 132.

Type (by subs. design.) : *D. exulans* Linné.

Diomedea exulans rothschildi Mathews. Australian Wandering Albatros.

Diomedea exulans rothschildi Mathews, Birds Austr. vol. ii. 1912, p. 246 : Australian Seas.

Synonym :—

Diomedea exulans Buller, Suppl. vol. i. p. 128. [The type-locality of *Diomedea exulans* Linné, Syst. Nat. 10th ed. 1758, p. 132, is Cape Seas.]

Range : New Zealand Seas : Antipodes Islands (breeding), Auckland Islands (breeding), & Chatham Islands (breeding).

Diomedea epomophora epomophora Lesson. Campbell Island
Royal Albatros.

Diomedea epomophora Lesson, Annales Sci. Nat. Paris,
1st ser. vol. vi. 1825, p. 95 : Campbell Island.

Synonym :—

Diomedea regia Buller, Trans. New Zeal. Inst. 1891, vol. xiii.
1892, p. 230 ; Otago and Campbell Island ; Buller, Suppl.
vol. i. p. 138 (part.).

Range : New Zealand Seas—Campbell Island (breeding).

Diomedea epomophora mccormicki Mathews. Enderby Island
Royal Albatros.

Diomedea epomophora mccormicki Mathews, Birds Austr.
vol. ii. 1912, p. 216 : Auckland Islands.

Synonym :—

Diomedea regia Buller, Suppl. vol. i. p. 138 (part.).

Range :—Enderby Island, Auckland Group (breeding).

Note :—Mathews (*l. c.*) has shewn that *D. regia* Buller,
at best, was a mixture of the two preceding forms ; whilst
Lesson's name is certain and has over sixty years priority.

Genus THALASSARCHE.

Thalassarche Reichenbach, Nat. Syst. Vögel, 1852, p. v.

Type (by original designation) : *T. melanophris* (Tem-
minck).

Thalassarche melanophris impavida Mathews. Australian
Black-browed Mollymawk.

Thalassarche melanophris impavida Mathews, Birds Austr.
vol. ii. 1912, p. 267 : Tasmania.

Synonym :—

Diomedea melanophrys Buller, Suppl. vol. i. p. 146. [The type-
locality of *Diomedea melanophris* Temminck & Laugier,
Planch. Color. d'Ois. 76 livr. 1828, pl. 456, is Cape Seas.]

Range :—New Zealand Seas : Campbell Island (breeding) ;
? Sisters, Chatham Islands.

Thalassarche bulleri (Rothschild). Snares Island Mollymawk.

Diomedea bulleri Rothschild, Bull. Brit. Orn. Club, vol. i. 1893, p. lviii : New Zealand.

Synonym :—

Diomedea bulleri Buller, Suppl. vol. i. p. 149.

Range :—Snares Island (breeding).

Genus THALASSOGERON.

Thalassogeron Baird, Brewer, and Ridgway, Mem. Mus. Comp. Zool., Harvard, vol. xiii. 1884, p. 345.

Type (by original designation) : *T. chrysostoma culminatus* (Gould).

Thalassogeron chrysostoma mathewsi (Rothschild). Campbell Island Flat-billed Mollymawk.

Diomedea culminata mathewsi Rothschild, Bull. Brit. Orn. Club, vol. xxxix. 1912, p. 70 : Campbell Island.

Synonym :—

Diomedea culminata Buller, Suppl. vol. i. p. 154. [The type-locality of *Diomedea chrysostoma* Forster, Mém. Math. et Phys. Acad. Roy. Sci. Paris, vol. x. 1785, p. 571, pl. xiv., is Cape Seas ; and *Diomedea culminata* Gould, Proc. Zool. Soc. 1843, p. 107, is the name used for the Australian form of the species.]

Range :—New Zealand Seas, Campbell Island (breeding).

Thalassogeron chlororhynchos bassi (Mathews). East Australian Yellow-nosed Mollymawk.

Diomedea bassi Mathews, Nov. Zool. vol. xviii. 1912, p. 206 : East Australia.

Synonym :—

Diomedea chlororhyncha Buller, Suppl. vol. i. p. 154. [The type-locality of *Diomedea chlororhynchos* Gmelin, Syst. Nat. 1789, p. 568, is Cape Seas.]

Range :—New Zealand Seas.

Thalassogeron cantus salvini Rothschild. Bounty Island Mollymawk.

Thalassogeron salvini Rothschild, Bull. Brit. Orn. Club, vol. i. 1893, p. lviii : New Zealand.

Synonyms :—

Diomedea salvini Buller, Suppl. vol. i. p. 150.

Diomedea cauta id. ib. p. 153. [The type-locality of *Diomedea cauta* Gould, Proc. Zool. Soc. for 1840, 1841, p. 177, is Bass' Straits.]

Range :—New Zealand Seas, Bounty Island (breeding).

Note :—There is little doubt that Buller was not well acquainted with the distinguishing features of the species and subspecies of Mollymawks. In this instance, he accepts both *Diomedea salvini* and *D. cauta* as occurring on the Snares, and the matter on p. 153 clearly shows his views on this point were quite obscure. The fact is that *D. salvini* is the New Zealand breeding-race of *D. cauta*, and consequently both cannot be found together at the Snares.

Genus PHŒBETRIA.

Phæbetria Reichenbach, Nat. Syst. Vögel, 1852, p. v.

Type (by original designation) : *P. palpebrata* (Forster).

Phæbetria palpebrata huttoni Mathews. New Zealand Light-mantled Sooty Albatros.

Phæbetria palpebrata huttoni Mathews, Birds Austr. vol. ii. 1912, p. 297 : New Zealand Seas.

Synonym :—

Phæbetria fuliginosa Buller, Suppl. vol. i. p. 155 (part.). [The type-locality of *Diomedea palpebrata* Forster, Mém. Math. et Phys. Acad. Roy. Sci. Paris, vol. x. 1785, p. 571, is lat. 64° S., long. 38° E.; and *Diomedea fuliginosa* Gmelin, Syst. Nat. 1789, p. 568, is based on Forster's bird.]

Range :—New Zealand Seas : Antipodes Island, Auckland Island, Campbell Islands, and Macquarie Island (breeding).

Phæbetria fusca campbelli Mathews. Australian Sooty Albatros.

Phæbetria fusca campbelli Mathews, Birds Austr. vol. ii. 1912, p. 304 : Australian Seas.

Synonym :—

Phæbetria fuliginosa Buller, Suppl. vol. i. p. 155 (part.). [The type-locality of *Diomedea fusca* Hilsenberg, Froriep's Notizen, vol. iii. 1822, no. 5 (49), p. 74, is Mozambique Channel.]

Range :—New Zealand Seas.

Order LARIFORMES.

Family LARIDÆ.

[Genus HYDROCHELIDON.

Hydrochelidon Boie, Isis, 1822, p. 563.Type (by subsequent designation) : *H. nigra* (Linné).*Hydrochelidon leucoptera grisea* (Horsfield). Eastern White-winged Black Tern.*Sterna grisea* Horsfield, Trans. Linn. Soc. Lond. vol. xiii. 1821, p. 199 : Java.

Synonym :—

Hydrochelidon leucoptera Buller, Suppl. vol. i. p. 157. [The type-locality of *Sterna leucoptera* Temminck, Manuel d'Ornith. 1815, p. 483, is Shores of the Mediterranean.]Range :—New Zealand (accidental visitor, one occurrence: Waihopai River, Dec. 12th, 1868, in *full breeding-plumage*) : extralimital.Note :—Though no doubt has hitherto been cast upon this record, we are agreed that it seems quite inadmissible (*cf.* Mathews, Birds Austr. vol. ii. p. 314, 1912).]

Genus HYDROPROGNE.

Hydroprogne Kaup, Skizz. Entwick.-Gesch. Nat. Syst. 1829, p. 91.Type (by subs. design.) : *H. tschegrava* (Lepechin).*Hydroprogne tschegrava oliveri*, subsp. n. New Zealand Caspian Tern.

Synonym :—

Heroprogne (sic) *caspia* Buller, Suppl. vol. i. p. 157. [The type-locality of *Sterna tschegrava* Lepechin, Nov. Comm. Acad. Petrop. vol. xiv. pt. 1, 1770, p. 500, is Shores of the Caspian Sea, and *S. caspia* was described by Pallas from the same locality in the same journal 82 pages subsequently.]

Range :—New Zealand (breeding).

Note :—The New Zealand birds agree with *H. t. strenua* Gould (Proc. Zool. Soc. 1846, p. 21), the Australian race, in having longer bills than the typical form, but are smaller

than that subspecies and have also shorter wings. The bill averages 71 mm. against 66 mm. in the typical form and 75 mm. in *H. t. strenua*; the wing averages 400 mm. as compared with 420 mm. in *H. t. strenua*.

Type in the British Museum.

Genus THALASSEUS.

Thalasseus Boie, Isis, 1822, p. 563.

Type (by subsequent designation): *T. sandvicensis* (Latham).

Thalasseus bergii rectirostris (Peale). Fijian Crested Tern.

Sterna rectirostris Peale, U.S. Expl. Exped., Zool. 1848, p. 281: Fiji Islands.

Synonym:—

Sterna bergii Oliver, Trans. New Zeal. Inst. vol. xliv. 1912, p. 215. [The type-locality of *Sterna bergii* Lichtenstein, Verzeichn. Doubl. Zool. Mus. Berl. 1823, p. 80, is Cape of Good Hope.]

Range:—Kermadec Islands (one occurrence recorded by Oliver as above would be referable to the Fijian form).

Genus STERNA.

Sterna Linné, Syst. Nat. 10th ed. 1758, p. 137.

Type (by tautonymy): *S. hirundo* Linné.

Sterna albistriata albistriata (Gray). Black-fronted Tern.

Hydrochelidon albistriata Gray, Voy. 'Erebus' and 'Terror,' Birds, 1845, p. 19: New Zealand.

Synonyms:—

Sterna antarctica (not Lesson) Wagler, Isis, 1831, p. 1223: New Zealand.

Sterna albistriata Buller, Suppl. vol. i. p. 158.

Range:—New Zealand (breeding).

Note:—In the 'Subantarctic Islands of New Zealand,' vol. i. 1909, p. 556, Waite noted discrepancies in the dates of publication of the 'Erebus' and 'Terror' birds. Mr. Sherborn informs us that pages 1 to 8 were published in 1844, and pages 9 to 20 in 1845.

Sterna striata striata Gmelin. New Zealand White-fronted Tern.

Sterna striata Gmelin, Syst. Nat. 1789, p. 609 : New Zealand.

Synonyms :—

Sterna frontalis Gray, Voy. 'Erebus' and 'Terror,' Birds, 1845, p. 19 : New Zealand.

Sterna albifrons (not Pallas) Peale, U.S. Expl. Exped., Zool. 1848, p. 279 : Bay of Islands, North Island

Sterna frontalis Buller, Suppl. vol. i. p. 158.

Range :—New Zealand (breeding).

Sterna striata bethunei Buller. Auckland Islands White-fronted Tern.

Sterna bethunei Buller, Trans. New Zeal. Inst. vol. xxviii. 1896, p. 349 : Auckland Islands.

Synonym :—

Sterna bethunei Buller, Suppl. vol. i. p. 159.

Range :—Auckland Islands (breeding) ; ? Chatham Islands (breeding).

Sterna vittata bollonsi. subsp. n. New Zealand Subantarctic Tern.

Synonyms :—

Sterna bethunei Buller, Trans. New Zeal. Inst. 1895, vol. xxviii. p. 348, 1896, nom. nudum.

Sterna vittata Buller, Suppl. vol. i. p. 158. [The type-locality of *Sterna vittata* Gmelin, Syst. Nat. 1789, p. 609, is Kerguelen Island.]

Range :—Subantarctic Islands of New Zealand (breeding).

Note :—The New Zealand specimens of this species differ from typical birds in their lighter coloration both above and below and probably also in their shorter wing-measurement : wing under 260 mm., wing in typical form over 275 mm.

Type in the British Museum.

Genus STERNULA.

Sternula Boie, Isis, 1822, p. 563.

Type (by subsequent designation) : *S. albifrons* (Vroeg).

Sternula nereis davisæ, subsp. n. New Zealand Fairy Tern.

Synonyms :—

? *Sterna alba* (not Sparrman) Potts, Trans. New Zeal. Inst. vol. iii. 1871, p. 106 : South Island.

Sterna nereis Buller, Suppl. vol. i. p. 161. [The type-locality of *Sternula nereis* Gould, Proc. Zool. Soc. for 1842, 1843, p. 140, is Bass' Strait.]

Range :—New Zealand (breeding).

Note :—The New Zealand specimens are distinctly separated from the Australian forms by their larger size and darker coloration, the black lores being also more extensive. Measurements : *S. n. davisæ* : culmen 31–35 ; wing average 200 mm. : typical birds have the culmen 33 and the wing under 185 mm.

Type in the British Museum.

Genus ONYCHOPRION.

Onychoprion Wagler, Isis, 1832, p. 277.

Type (by monotypy) : *O. fuscatus* (Linné).

Onychoprion fuscatus serratus (Wagler). Australian Sooty Tern.

Sterna serrata Wagler, Natürl. Syst. Amphib. 1830, p. 89, note : New Caledonia.

Synonyms :—

Sterna melanura Gould, Synops. Birds Austr. pt. iv. App., 1838, p. 7 : New South Wales.

Sterna gouldi Reichenbach, Aves Natat. Longip. xxii. 1848, f. 829 : West Australia.

Sterna fuliginosa Buller, Suppl. vol. i. p. 159. [The type-locality of *Sterna fuscata* Linné, Syst. Nat. 12th ed. 1766, p. 228, is S. Domingo, West Indies ; and *Sterna fuliginosa* Gmelin, Syst. Nat. 1789, p. 605, is an absolute synonym. Linné's description is of a young bird, but is clearly applicable to this bird only.]

Range :—Kermadec Islands (breeding) ; extralimital.

Genus PROCELSTERNA.

Procelsterna Lafresnaye, Mag. de Zool. 1842, pl. 29.

Type (by monotypy): *P. cerulea* (Bennett).

Procelsterna cerulea cinerea (Gould). Little Grey Noddy.

Anous cinereus Gould, Proc. Zool. Soc. 1845, p. 104: north-eastern coast of Australia.

Synonyms:—

Procelsterna albiritta Bonaparte, Comptes Rendus Sci. Paris, vol. xlii. 1856, p. 773: new name for *A. cinereus* Gould.

Procelsterna cinerea Buller, Suppl. vol. i. p. 161. [The type-locality of *Sterna cerulea* Bennett, Narr. Whaling Voyage, vol. ii. 1840, p. 248, is Christmas Island.]

Range:—Kermadec Islands (breeding); New Zealand [accidental visitor: one occurrence, Cape Maria van Diemen, 1882. Grant ('Ibis,' 1905, p. 561) recorded three specimens from Dusky Sound, South Island. One of us went very closely into this matter, and it was proved that an interchange of labels had taken place and that the birds had been procured on Curtis Island, Kermadec Group].

Note:—Buller, in the Suppl. vol. i. p. 162, included *Anous stolidus* as a Kermadec breeder. One of us has already pointed out that this was an erroneous quotation (Iredale, 'Emu,' vol. x. 1910, p. 10).

Genus MEGALOPTERUS.

Megalopterus Boie, Isis, 1826, p. 980.

Type (by monotypy): *M. tenuirostris* (Temminck).

Megalopterus minutus minutus (Boie). White-capped Noddy.

Anous minutus Boie, Isis, 1844, p. 188: north-eastern Australia.

Synonyms:—

Anous leucocapillus Gould, Proc. Zool. Soc. 1845, p. 103: North-eastern Australia.

Anous atrofuscus Stone, Proc. Acad. Nat. Sci. Philad. 1894, p. 117: New Guinea.

Micranous leucocapillus Buller, Suppl. vol. i. p. 163.

Range:—Kermadec Islands (breeding).

Genus GYGIS.

Gygis Wagler, Isis, 1832, p. 1223.

Type (by monotypy) : *G. alba* (Sparrman).

Gygis alba royana Mathews. White Tern.

Gygis alba royana Mathews, Birds Austr. vol. ii. 1912, p. 433 : Kermadec Islands.

Synonym :—

Gygis alba Buller, Suppl. vol. i. p. 163. [The type-locality of *Sterna alba* Sparrman, Mus. Carlson. 1786, fasc. i. no. 11, is Ascension Island, Atlantic Ocean.]

Range :—Kermadec Islands (breeding).

Genus BRUCHIGAVIA.

Bruchigavia Bonaparte, Consp. Gen. Av. vol. ii. 1857, p. 228.

Type (by monotypy) : *B. novæhollandiæ* (Stephens).

Bruchigavia melanorhyncha Buller. Black-billed Gull.

Bruchigavia melanorhyncha Buller, Ibis, 1869, p. 43 : South Island.

Synonym :—

Larus bulleri Hutton, Cat. Birds New Zeal. 1871, p. 41 : South Island ; ? Potts, Ibis, 1872, p. 38 : South Island ; Buller, Suppl. vol. i. p. 164.

Range :—South Island (breeding).

Note :—There appears to be much confusion in the early literature concerning this very distinct species. This has not been cleared up in the 'Supplement,' as mention is made of another bird with a brown bill (distinct from *Larus scopulinus*) and red legs. Such problems cannot be elucidated without further collection of specimens.

Bruchigavia novæhollandiæ scopulinus (Forster). New Zealand Red-billed Gull.

Larus scopulinus Forster, Descr. Anim. ed. Licht. 1844. p. 106 : Dusky Sound, South Island.

Synonyms :—

Larus novæhollandiæ Buller, Suppl. vol. i. p. 165.

Larus scopulinus Buller, Suppl. vol. i. p. 166. (The type-locality of *Larus novæhollandiæ* Stephens in Shaw's Gen. Zool. vol. xiii. pt. 1, 1826, p. 196, is New South Wales; and *Larus scopulinus* Gray in Dieffenbach's Travels in New Zeal. vol. ii. 1843, p. 200, is a nomen nudum.)

Range :—New Zealand (breeding), Subantarctic Islands (breeding).

Note :—It would be quite unwise to accept the Australian *B. n. novæhollandiæ* as a visitor to New Zealand without authentic specimens having been carefully examined by competent critics. It is obvious from Buller's writings that he was not familiar with the Australian forms, and the exposition by one of us (Mathews, Birds Austr. vol. ii. pp. 191-2) has made it clear that easily differentiated forms occur round the Australian coast.

Genus LARUS.

Larus Linné, Syst. Nat. 10th ed. 1758, p. 136.

Type (by subsequent designation) : *L. canus* Linné.

Larus dominicanus antipodus (Bruch). New Zealand Black-backed Gull.

Dominicanus antipodus Bruch, Journ. für Orn. 1853, p. 100: New Zealand.

Synonyms :—

Larus melanoleucus Boie, Isis, 1844, p. 196: nomen nudum.

Larus dominicanus Buller, Suppl. vol. i. p. 168. (The type-locality of *Larus dominicanus* Lichtenstein, Verzeichn. Doubl. Zool. Mus. Berl. 1823, p. 82, is South America.)

Range :—New Zealand (breeding), Subantarctic Islands (breeding).

Genus CATHARACTA.

Catharacta Brünnich, Orn. Boreal. 1764, p. 32.

Type (by subsequent designation) : *C. skua* Brünnich.

Catharacta lönnerbergi lönnerbergi Mathews. New Zealand Great Skua.

Catharacta antarctica lönnerbergi Mathews, Nov. Zool. vol. xviii. 1912, p. 212: New Zealand Seas.

Synonyms :—

Megalestris antarctica Buller, Suppl. vol. i. p. 169. [The type-locality of *Lestris antarcticus* Lesson, *Traité d'Orn.* 1831, p. 616, is Falkland Islands, and this is better considered as a subspecies of *C. skua* Brünnich (*cf.* Mathews, *Birds Austr.* vol. ii. 1913, p. 493).]

Range :—New Zealand Seas : Chatham Islands and Subantarctic Islands of New Zealand (breeding).

Catharacta maccormicki maccormicki (Saunders). South Polar Skua.

Stercorarius maccormicki Saunders, Bull. Brit. Orn. Club, vol. iii. 1893, p. xii : Victoria Land.

Synonym :—

Megalestris maccormicki Buller, Suppl. vol. i. p. 170.

Range :—New Zealand (one occurrence, Stewart Island, 1895) ; Antarctic, Victoria Land (breeding).

Genus STERCORARIUS.

Stercorarius Schaeffer, Mus. Ornith. 1789, p. 62.

Type (by monotypy) : *S. parasiticus* (Linné).

Stercorarius parasiticus (Linné). Arctic Skua.

Larus parasiticus Linné, Syst. Nat. 10th ed. 1758, p. 136 : coasts of Sweden.

Synonym :—

Stercorarius crepidatus Buller, Suppl. vol. i. p. 171. [It has been recently shown that the bird commonly known as *S. crepidatus* (Gmelin, Syst. Nat. 1789, p. 602) is the true *L. parasiticus* Linné.]

Range :—New Zealand Seas (accidental visitor) ; extra-limital.

Note :—So much confusion exists through the uncertain naming by European ornithologists of birds killed in New Zealand that it is quite impossible to decide from the literature whether all the references belong to one species. We are inclined to believe that both the Arctic and Long-tailed Skuas have occurred in New Zealand waters. It should be noted that in Buller's first edition of the *Birds of New*

Zealand,' 1873, p. 269, the first specimen was referred to *S. parasiticus* auct., non Linné = *S. longicaudus* Vieillot (Nouv. Dict. d'Hist. Nat. vol. xxxii. 1819, p. 157). Re-examination of the specimens preserved in the Dominion are necessary to decide this matter.

Order CHARADRIIFORMES.

Family MORINELLIDÆ.

Genus MORINELLA.

Morinella Meyer & Wolf, Taschenb. Vögel, 1810, p. 382, note.

Type (by monotypy) : *M. interpres* (Linné).

Morinella interpres oahuensis (Bloxham). Eastern Turnstone.

Tringa oahuensis Bloxham, Voy. 'Blonde' Sandwich Is., 1826, p. 251 : Sandwich Islands.

Synonym :—

Arenaria interpres Buller, Suppl. vol. i. p. 171. [The type-locality of *Tringa interpres* Linné, Syst. Nat. 10th ed. 1758, p. 148, is Sweden.]

Range :—New Zealand (irregular visitor) ; extralimital.

Note :—In the order Charadriiformes we do not intend to give the full synonymy of those birds which, breeding in the Arctic and Subarctic zones of the Holarctic Region, range southwards and occur as winter visitors or irregular wanderers in New Zealand during the summer months from November to April).

Family HÆMATOPODIDÆ.

Genus HÆMATOPUS.

Hæmatopus Linné, Syst. Nat. 10th ed. 1758, p. 152.

Type (by monotypy) : *H. ostralegus* Linné.

Hæmatopus ostralegus finschi Martens. New Zealand Oyster-Catcher.

Hæmatopus finschi Martens, Orn. Monatsb. vol. v. 1897, p. 190 : South Island.

Synonyms :—

Hæmatopus reischeki Rothschild, Bull. Brit. Orn. Club, vol. x. 1899, p. iv : Kaiparu, North Island.

Hæmatopus longirostris Buller, Suppl. vol. i. p. 172. [The type-locality of *H. ostralegus* Linné, Syst. Nat. 10th ed. 1758, p. 152, is Sweden (Oeland).]

Range :—Both Islands (breeding).

Hæmatopus niger unicolor Forster. New Zealand Black Oyster-Catcher.

Hæmatopus unicolor Forster, Descr. Anim. ed. Licht. 1844, p. 112 : New Zealand.

Synonym :—

Hæmatopus unicolor Buller, Suppl. vol. i. p. 172. [The type-locality of *H. niger* Temminck, Manuel d'Ornith. vol. ii. 1820, p. 533, is South Africa and *H. unicolor* Wagler, Isis, 1832, p. 1230, is a nomen nudum.]

Range :—Both Islands (breeding).

Family CHARADRIIDÆ.

Genus LOBIBYX.

Lobibyx Heine, Nomencl. Mus. Heine. 1890, p. 334.

Type (by orig. design.) : *L. novæhollandiæ* (Stephens).

Lobibyx novæhollandiæ (Stephens). Spur-winged Plover.

Vanellus novæhollandiæ Stephens in Shaw's Gen. Zool. vol. xi. 1819, p. 516 : New South Wales.

Synonyms :—

Tringa lobata (not Linné) Latham, Index Ornith. Suppl. 1801, p. lxxv : New South Wales.

Charadrius gallinaceus Wagler, Syst. Avium, *Charadrius*, 1827, sp. 50 : New South Wales.

Lobicanellus lobatus Buller, Suppl. vol. i. p. 173.

Range :—New Zealand (one occurrence, near Wanganui, North Island, August 1886) ; East Australia (breeding).

Genus PLUVIALIS.

Pluvialis Schaeffer, Museum Ornith. 1789, p. 48.

Type (by tautonymy) : *P. apricarius* (Linné).

Pluvialis dominicus fulvus (Gmelin). Eastern Golden Plover.

Charadrius fulvus Gmelin, Syst. Nat. 1789, p. 687 : Tahiti.

Synonym :—

Charadrius dominicus Buller, Suppl. vol. i. p. 174. [The type-locality of *Charadrius dominicus* P. L. S. Müller, Natursyst. Suppl. 1776, p. 116, is Santo Domingo, West Indies.]

Range :—New Zealand (irregular visitor) ; extralimital.

Genus PLUVIORHYNCHUS.

Pluviorhynchus Bonaparte, Comptes Rendus Sci. Paris, vol. xliii. 1856, p. 417.

Type (by subs. design.) : *P. obscurus* (Gmelin).

Pluviorhynchus obscurus (Gmelin). New Zealand Dottrel.

Charadrius obscurus Gmelin, Syst. Nat. 1789, p. 686 : Dusky Sound, South Island.

Synonyms :—

Charadrius glareola Forster, Descr. Anim. ed. Licht. 1844, p. 109 : same locality.

Ochthodromus obscurus Buller, Suppl. vol. i. p. 175.

Range :—Both Islands (breeding) ; Stewart Island (breeding).

Genus CIRREPIDESMUS.

Cirrepidesmus Bonaparte, Comptes Rendus Sci. Paris, vol. xliii. 1856, p. 417.

Type (by tautonymy) : *C. inconspicuus* (Lichtenstein).

Cirrepidesmus bicinctus (Jardine & Selby). Double-banded Dottrel.

Charadrius bicinctus Jardine & Selby, Illus. Ornith. vol. i. 1827, pl. 228 : New South Wales.

Synonym :—

Ochthodromus bicinctus Buller, Suppl. vol. i. p. 175.

Range :—Both Islands (breeding) ; Eastern Australia.

Genus EUPODA.

Eupoda Brandt in Tchihatcheff's Voy. Sci. Altai Orient. 1845, p. 444.

Type (by monotypy): *E. asiatica* (Pallas).

Eupoda vereda (Gould). Oriental Dottrel.

Charadrius veredus Gould, Proc. Zool. Soc. 1848, p. 38 : north-western Australia.

Range :—Kermadec Islands (one occurrence, April 24 1908) ; extralimital.

Genus LEUCOPOLIUS.

Leucopolius Bonaparte, Comptes Rendus Sci. Paris, vol. xliii. 1856, p. 417.

Type (by tautonymy) : *L. marginatus* (Vieillot).

Leucopolius ruficapillus ruficapillus (Temminck). Red-capped Dottrel.

Charadrius ruficapillus Temminck & Laugier, Planch. Color. d'Ois. 8^e livr. 1821, pl. 47. fig. 2 : New South Wales.

Synonyms :—

Charadrius marginatus Lesson, Manuel d'Orn. vol. ii. 1828, p. 318 : Victoria.

Ægialitis ? *canus* Gould, Synops. Birds Austr. pt. iv. App. 1838, p. 6 : New South Wales.

Ægialitis ruficapilla Buller, Suppl. vol. i. p. 175.

Range :—New Zealand (accidental visitor : one occurrence, Waikanae, North Island, Dec. 1878) ; extralimital.

Genus THINORNIS.

Thinornis Gray, Voy. ' Erebus ' and ' Terror,' Birds, 1845, p. 11.

Type (by monotypy) : *T. novæseelandiæ* (Gmelin).

Thinornis novæseelandiæ (Gmelin). New Zealand Shore-Plover.

Charadrius novæseelandiæ Gmelin, Syst. Nat. 1789, p. 684 : Queen Charlotte's Sound, South Island.

Synonyms :—

Charadrius dudoraa Wagler, Syst. Avium, *Charadrius* sp. 14, 1827 : same locality.

Charadrius torquatus Forster, Descr. Anim. ed. Licht. 1844, p. 108 : same locality.

Thinornis rossii Gray, Voy. 'Erebus' and 'Terror,' Birds, 1845, p. 12, pl. 11 : Auckland Islands (? errore).

Thinornis novaezealandiae Buller, Suppl. vol. i. p. 176.

Thinornis rossii id. ib.

Range :—New Zealand (breeding); Chatham Islands (breeding); ? Auckland Islands.

Note :—We have examined the type of *Thinornis rossii* Gray, and consider it to be immature, as Buller first concluded. It has never been found again on the Auckland Islands, and we would suggest that the specimen was not procured there, but at Auckland in the North Island. It bears no original label, and McCormick states that "Only one Plover was observed and no specimen obtained at the Auckland Islands."

Genus ANARHYNCHUS.

Anarhynchus Quoy & Gaimard, Voy. de l'Astrol., Zool. vol. i. 1830, p. 252.

Type (by monotypy) : *A. frontalis* Quoy & Gaimard.

Anarhynchus frontalis Quoy & Gaimard. Wry-billed Plover.

Anarhynchus frontalis Quoy & Gaimard, Voy. de l'Astrol., Zool. vol. i. 1830, p. 252 : Baie Chouraki, North Island.

Synonyms :—

Anarhynchus albifrons Schlegel, De Dier-Kunde, vol. i. 1857, p. 435. (Improvement for "*frontalis*" Q. & G.)

Anarhynchus frontalis Buller, Suppl. vol. i. p. 177.

Range :—Both Islands (breeding).

Family RECURVIROSTRIDÆ.

Genus HYPsIBATES.

Hypsibates Nitzsch in Ersch u. Grüber's Encyclop. vol. xvi. 1827, p. 150.

Type (by monotypy) : *H. himantopus* (Linné).

Hypsibates leucocephalus albus (Ellman). New Zealand Stilt.

Himantopus albus Ellman, Zoologist, 1861, p. 7470: New Zealand.

Synonyms :—

? *Himantopus picatus* Ellman, Zoologist, 1861, p. 7470: New Zealand.

Himantopus albicollis (nec Vieillot), Buller, Trans. New Zealand Inst. vol. vii. 1875, p. 224: North Island.

Himantopus picatus Buller, Suppl. vol. i. p. 177.

Himantopus leucocephalus id. ib. p. 178.

Himantopus albicollis id. ib. p. 179.

Range :—New Zealand (breeding).

Note:—There can be no doubt that the New Zealand Stilt is only subspecifically distinct from the Australian *H. leucocephalus* Gould (Synops. Birds Austr. 1837, pt. ii. pl. 34: New South Wales), from which it was first differentiated by Sharpe in the Cat. Birds Brit. Mus. vol. xxiv. 1896, p. 319. The reference by Buller of a specimen to *H. leucocephalus* (as above) is due to the fact that some examples approach very closely to the typical form. Buller's *H. albicollis* is simply founded on a plumage change.

The correct nomination of the form has given considerable trouble, as this is the only case where the names introduced by Ellman have to be seriously treated. When Sharpe separated the New Zealand form he used Ellman's *H. picatus*, but we are forced to consider that indeterminate. We would also have been pleased to have dismissed Ellman's *H. albus* under the same plea, but feel compelled to admit its validity. In order to place the matter fairly before the critic, we append Ellman's accounts :—

“ Pied Stilt (Torea-iti) *Himantopus picatus*: of various proportions of black and white.

White Stilt (Tore-aiti, Tutumata) *Himantopus albus*. This species is scarce, smaller than the preceding, and is not subject to varieties of plumage. The head, neck, back, and belly are pure white. The wings are of indigo-black. Both sexes are similar in plumage.”

The former might be applicable to a seasonal change of

the next species, but the second description is comparatively complete.

It has been suggested that as the New Zealand Stilt undertakes seasonal movements it migrates to Australia. This is easily disproved by the fact that no specimen has been procured in Australia giving the subspecific characters of the New Zealand form.

Hypsibates novæzealandiæ (Gould). Black Stilt.

Himantopus novæzealandiæ Gould, Birds Austr. 1841 (before Sept.), pl. 25 : Port Nicholson, North Island.

Synonyms :—

Himantopus melas Hombron & Jacquinot, Ann. Sci. Nat. Paris, 2nd ser. vol. xvi. 1841 (after Nov.), p. 320 : Otago, South Island.

Himantopus spicatus Potts, Trans. New Zealand Inst. vol. v. 1873, p. 177 : Selwyn, South Island.

Himantopus melas Buller, Suppl. vol. i. p. 179.

Range :—New Zealand (breeding).

Note :—The exact status of this form needs investigation. It seems to be a fixed melanistic form, which breeds true ; but the accounts are very confused and specimens are required to confirm the statements made.

Genus RECURVIROSTRA.

Recurvirostra Linné, Syst. Nat. 10th ed. 1758, p. 151.

Type (by monotypy) : *R. avocetta* Linné.

Recurvirostra novæhollandiæ novæhollandiæ Vieillot.
Eastern Red-necked Avocet.

Recurvirostra novæhollandiæ Vieillot, Nouv. Dict. d'Hist. Nat. vol. iii. 1816, p. 103 : Victoria.

Synonyms :—

Recurvirostra rubricollis Temminck, Manuel d'Orn. vol. ii. 1823, p. 592 : Victoria.

Recurvirostra novæhollandiæ Buller, Suppl. vol. i. p. 180.

Range :—New Zealand (accidental, few occurrences) : extralimital.

Family SCOLOPACIDÆ.

Genus NUMENIUS.

Numenius Brünnich, Zool. Fund. 1771, p. 76.

Type (by subsequent designation) : *N. arquata* (Linné).

Numenius cyanopus Vieillot. Australian Curlew.

Numenius cyanopus Vieillot, Nouv. Dict. d'Hist. Nat. vol. viii. 1817, p. 306 : New South Wales.

Synonyms :—

Numenius australasianus Gould, Synops. Birds Austr. pt. iv. App. 1838, p. 6: New South Wales.

Numenius rufescens Gould, Proc. Zool. Soc. 1862, p. 286 : Formosa.

Numenius cyanopus Buller, Suppl. vol. i. p. 180.

Range :—New Zealand (accidental, few occurrences) ; extralimital.

Numenius phæopus variegatus (Scopoli) Australian Whimbrel.

Tantalus variegatus Scopoli, Del Flor. Faun. Insub. fasc. ii. 1786, p. 92 : Luzon.

Synonyms :—

Numenius uropygialis Gould, Proc. Zool. Soc. for 1840, 1841, p. 175 : south coast of Australia.

Numenius variegatus Buller, Suppl. vol. i. p. 181. [The type-locality of *Scolopax phæopus* Linné, Syst. Nat. 10th ed. 1758, p. 146, is Europe (Sweden).]

Range :—New Zealand (accidental : two occurrences, Wairau and Westport, Dec. 1893) ; Kermadec Islands (one, Sept. 1908) ; extralimital.

Genus MESOSCOLOPAX.

Mesoscolopax Sharpe, Cat. Birds Brit. Mus. vol. xxiv. 1896, pp. 338, 371.

Type (by monotypy) : *M. minutus* (Gould).

Mesoscolopax minutus (Gould). Little Whimbrel.

Numenius minutus Gould, Proc. Zool. Soc. 1840, p. 176, 1841 : New South Wales.

Synonym :—

Mesoscolopax minutus Buller, Suppl. vol. i. p. 181.

Range :—New Zealand (accidental : one occurrence, Lake Ellesmere, June 1900) ; extralimital.

Genus LIMOSA.

Limosa Schaeffer, Museum Ornith. 1789, p. 52.

Type (by tautonymy) : *L. limosa* (Linné).

Limosa lapponica baueri Naumann. Eastern Barred-rumped Godwit.

Limosa baueri Naumann, Vögel Deutschl. vol. viii. 1836, p. 429 : Victoria.

Synonyms :—

Limosa lapponica, var. *novæzealandiæ* Gray, Voy. 'Erebus' and 'Terror,' Birds, 1845, p. 13 : New Zealand.

Limosa uropygialis Gould, Proc. Zool. Soc. 1848, p. 38 : Victoria.

Limosa novæzealandiæ Buller, Suppl. vol. i. p. 181. [The type-locality of *Scolopax lapponica* Linné, Syst. Nat. 10th ed. 1758, p. 147, is Lapland.]

Range :—New Zealand (regular and numerous visitor) ; extralimital.

Limosa limosa hæmastica (Linné). Hudsonian Godwit.

Scolopax hæmastica Linné, Syst. Nat. 10th ed. 1758, p. 147 : Hudson Bay, North America.

Synonym :—

Limosa hudsonica Buller, Suppl. vol. i. p. 185. [The type-locality of *Scolopax limosa* Linné, Syst. Nat. 10th ed. 1758, p. 147, is Europe (Sweden).]

Range :—New Zealand (accidental : one occurrence, Lake Ellesmere, Canterbury, 4 March 1902) ; extralimital.

Genus HETEROSCELUS.

Heteroscelus Baird, Rep. Expl. Surv. Railr. Pac. Ocean, vol. ix. 1858, p. 734.

Type (by original designation) : *H. brevipes* (Vieillot).

Heteroscelus incanus (Gmelin). Grey Sandpiper.

Scolopax incana Gmelin, Syst. Nat. 1789, p. 658 : Eimeo and Palmerston Island, Pacific Ocean.

Synonym :—

Heteractitis incanus Buller, Suppl. vol. i. p. 186.

Range :—New Zealand (accidental visitor : pair, Portland Island, autumn 1883) ; extralimital.

Genus GLOTTIS.

Glottis Koch, Syst. baier. Zool. 1816, pp. xlii, 294.

Type (by monotypy) : *G. nebularius* (Gunner).

Glottis nebularius (Gunner). Greenshank.

Scolopax nebularia Gunner in Leem's Lapp. Beskr. 1767, p. 215, note : Europe (Norway).

Synonym :—

Glottis nebularius Buller, Suppl. vol. i. p. 186.

Range :—New Zealand (accidental visitor : one occurrence, Otago, 1874) ; extralimital.

Genus EROLIA.

Erolia Vieillot, Analyse nouv. Ornith, 1816, p. 55.

Type (by monotypy) : *E. ferruginea* (Brünnich).

Erolia ferruginea (Brünnich). Curlew-Sandpiper.

Tringa ferruginea Brünnich, Ornith. Boreäl. 1764, p. 53 : Iceland.

Synonym :—

Ancylochilus subarquatus Buller, Suppl. vol. i. p. 187.

Range :—New Zealand (accidental visitor, few occurrences : Lake Ellesmere, Canterbury, Feb. 3rd, 1902, April 5th, 1903, two ; Lake Te Anau, Otago, March 1903) ; extralimital.

Genus PISOBIA.

Pisobia Billberg, Synopsis Faunæ Scand. vol. i. 1828, pt. ii. p. 136.

Type (by subsequent designation) : *P. minuta* (Leisler).

Pisobia minuta ruficollis Pallas. Red-necked Sandpiper.

Trynga ruficollis Pallas, Reise Russ. Reichs. vol. iii. 1776, p. 700 : Dauria (*i. e.* Amurland).

Synonym :—

Limonites ruficollis Buller, Suppl. vol. i. p. 186. [The type-locality of *Tringa minuta* Leisler, Nachtr. Bechst. Naturg. Deutschl. 1812, p. 74, is Germany.]

Range :—? New Zealand ; extralimital.

Note :—Buller included this upon Hutton's authority, which is thus quoted: "Mr. E. Stead brought me a specimen on July 22nd (1902) which he had shot near Lake Ellesmere. It was a female, well on in the breeding-plumage, and with well-developed eggs. It would, I think, have laid the eggs in about a month after being shot. Another specimen in non-breeding plumage was, I believe, sent to the British Museum by Lord Ranfurly early in the year." The latter specimen was named by Grant ('Ibis,' 1905, p. 564) as *Tringa subarquata* (Güldenst.) [= *Erolia ferruginea* (Brünnich)], who noted that it had been first identified by Captain Hutton as a Pectoral Sandpiper (*Heteropygia acuminata*), and subsequently referred by him to the Red-throated Stint (*Limonites ruficollis*). In view of such diverse attempts at nomination, this record requires re-investigation.

Genus HETEROPYGIA.

Heteropygia Coues, Proc. Acad. Nat. Sci. Philad. 1861, p. 190.

Type (by original designation): *H. fuscicollis* (Vieillot).

Heteropygia maculata acuminata (Horsfield). Sharp-tailed Sandpiper.

Totanus acuminatus Horsfield, Trans. Linn. Soc. vol. xiii. 1821, p. 192 : Java.

Synonym :—

Heteropygia acuminata Buller, Suppl. vol. i. p. 187. [The type-locality of *Tringa maculata* Vieillot, Nouv. Dict. d'Hist. Nat. vol. xxxiv. 1819, p. 465, is United States.]

Range :—New Zealand (irregular visitor) ; extralimital.

Genus CANUTUS.

Canutus Brehm, Vögel Deutschl. 1831, p. 653.

Type (by tautonymy) : *C. canutus* (Linné).

Canutus canutus (Linné). Knot.

Tringa canutus Linné, Syst. Nat. 10th ed. 1758, p. 150 : Europe (Sweden).

Synonym :—

Tringa canutus Buller, Suppl. vol. i. p. 187.

Range :—New Zealand (accidental visitor) ; extralimital.

Note :—The foregoing list of Charadriidæ would be very considerably lengthened were specimens collected ; it is advisable to submit such captures to competent ornithologists, as errors of identification are quite easily made, as is noted under *Pisobia minuta ruficollis* (Pallas).

Genus CŒNOCORYPHA.

Cœnocorypha Gray, Cat. Gen. Subgen. Birds, 1855, p. 119.

Type (by original designation) : *C. aucklandica* (Gray).

Cœnocorypha aucklandica aucklandica (Gray). Auckland Islands' Snipe.

Gallinago aucklandica Gray, Voy. ' Erebus ' and ' Terror,' Birds, 1845, p. 13 : Auckland Islands.

Synonyms :—

Scolopax holmesii Peale, United States Expl. Exped. 1848, p. 229 : nom. nud., Auckland Islands.

Gallinago aucklandica Buller, Suppl. vol. i. p. 188.

Range :—Auckland Islands (breeding).

Cœnocorypha aucklandica pusilla (Buller). Chatham Islands' Snipe.

Gallinago pusilla Buller, Ibis, 1869, p. 41 : Chatham Islands.

Synonym :—

Gallinago pusilla Buller, Suppl. vol. i. p. 188.

Range :—Chatham Islands (breeding).

Cœnocorypha aucklandica huegeli (Tristram). Snares Island Snipe.

Gallinago huegeli Tristram, Bull. Brit. Orn. Club, vol. i. 1893, p. xlvii: Snares Island.

Synonym :—

Gallinago huegeli Buller, Suppl. vol. i. p. 189.

Range :—Snares Island (breeding).

Cœnocorypha aucklandica tristrami (Rothschild). Antipodes Island Snipe.

Gallinago tristrami Rothschild, Bull. Brit. Orn. Club, vol. iii. 1894, p. xii: Antipodes Island.

Range :—Antipodes Island (breeding).

Genus GALLINAGO.

Gallinago Koch, Syst. baier. Zool. 1816, p. 312.

Type (by tautonymy) : *G. gallinago* (Linné).

Gallinago hardwickii (J. E. Gray). Australian Snipe.

Scolopax hardwickii Gray, Zool. Misc. 1831, p. 16: Tasmania.

Synonyms :—

Scolopax australis Latham, Index Ornith. Suppl. 1801, p. lxx: New South Wales. Preoccupied by *Scolopax australis* Scopoli, Annus I. Hist. Nat. 1769, p. 94.

Gallinago australis Buller, Suppl. vol. i. p. 191.

Range :—New Zealand (accidental visitor: one occurrence, Auckland, 26 March 1898); extralimital.

Family PHALAROPIDÆ.

Genus PHALAROPUS.

Phalaropus Tunstall, Ornith. Brit. 1771, p. 3.

Type (by tautonymy) : *P. fulicarius* (Linné).

Phalaropus fulicarius (Linné). Grey Phalarope.

Tringa fulicaria Linné, Syst. Nat. 10th ed. 1758, p. 148: Hudson Bay, North America.